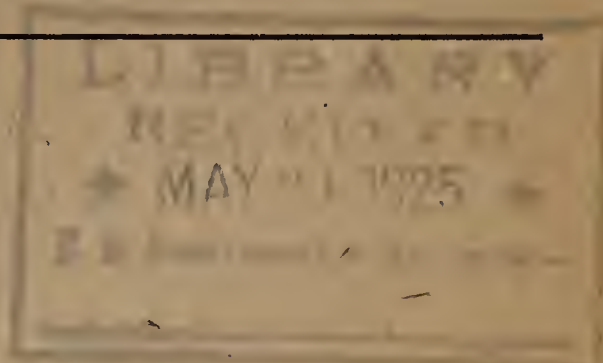


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UNITED STATES
DEPARTMENT OF AGRICULTURE



COOPERATIVE
EXTENSION
WORK



1923



OFFICE OF
COOPERATIVE EXTENSION
WORK

1925

DEPARTMENT OFFICIALS IN CHARGE OF COOPERATIVE EXTENSION WORK

EXTENSION SERVICE

C. W. WARBURTON, Director

OFFICE OF COOPERATIVE EXTENSION WORK

C. B. SMITH, Chief

J. A. EVANS, Assistant Chief

STATE DIRECTORS IN CHARGE OF COOPERATIVE EXTENSION WORK¹

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ARIZONA.—P. H. Ross, College of Agriculture, University of Arizona, Tucson.
ARKANSAS.—{ Dan T. Gray, director, College of Agriculture, University of Arkansas,
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T. R. Reid, assistant director, 310 Donaghey Building, Little Rock.
CALIFORNIA.—B. H. Crocheron, College of Agriculture, University of California, Berkeley.
COLORADO.—Roud McCann, State Agricultural College of Colorado, Fort Collins.
CONNECTICUT.—B. W. Ellis, Connecticut Agricultural College, Storrs.
DELAWARE.—C. A. McCue, University of Delaware, Newark.
FLORIDA.—Wilmon Newell, Agricultural Extension Service, Experiment Station, Gainesville.
GEORGIA.—J. Phil Campbell, Georgia State College of Agriculture, Athens.
IDAHO.—E. J. Iddings,² College of Agriculture, University of Idaho, Moscow.
ILLINOIS.—H. W. Mumford, College of Agriculture, University of Illinois, Urbana.
INDIANA.—G. I. Christie, Purdue University, La Fayette.
IOWA.—R. K. Bliss, Iowa State College of Agriculture and Mechanic Arts, Ames.
KANSAS.—H. J. C. Umberger, Kansas State Agricultural College, Manhattan.
KENTUCKY.—T. P. Cooper, College of Agriculture, University of Kentucky, Lexington.
LOUISIANA.—W. R. Perkins, Louisiana State University and Agricultural and Mechanical
College, University Station, Baton Rouge.
MAINE.—L. S. Merrill, College of Agriculture, University of Maine, Orono.
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MICHIGAN.—R. J. Baldwin, Michigan Agricultural College, East Lansing.
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MISSOURI.—A. J. Meyer, College of Agriculture, University of Missouri, Columbia.
MONTANA.—{ Alfred Atkinson, director, } Montana State College of Agriculture and
J. C. Taylor, assistant director, } Mechanic Arts, Bozeman.
NEBRASKA.—W. H. Brokaw, College of Agriculture, University of Nebraska, Lincoln.
NEVADA.—C. W. Creel, College of Agriculture, University of Nevada, Reno.
NEW HAMPSHIRE.—J. C. Kendall, University of New Hampshire, Durham.
NEW JERSEY.—H. J. Baker, College of Agriculture and Mechanic Arts of Rutgers College
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NEW MEXICO.—C. F. Monroe, New Mexico College of Agriculture and Mechanic Arts,
State College.
NEW YORK.—C. E. Ladd, New York State College of Agriculture, Ithaca.
NORTH CAROLINA.—I. O. Schaub, North Carolina State College of Agriculture and Engi-
neering, State College Station, Raleigh.
NORTH DAKOTA.—G. W. Randlett, North Dakota Agricultural College, Agricultural College.
OHIO.—H. C. Ramsower, College of Agriculture, Ohio State University, Columbus.
OKLAHOMA.—W. A. Conner, Oklahoma Agricultural and Mechanical College, Stillwater.
OREGON.—P. V. Maris, Oregon Agricultural College, Corvallis.
PENNSYLVANIA.—M. S. McDowell, Pennsylvania State College, State College.
RHODE ISLAND.—A. E. Stene, Rhode Island State College, Kingston.
SOUTH CAROLINA.—W. W. Long, Clemson Agricultural College of South Carolina, Clemson
College.
SOUTH DAKOTA.—W. F. Kumlien, South Dakota State College of Agriculture and Mechanic
Arts, Brookings.
TENNESSEE.—C. A. Keffer, College of Agriculture, University of Tennessee, Knoxville.
TEXAS.—T. O. Walton, Agricultural and Mechanical College of Texas, College Station.
UTAH.—William Peterson, Agricultural College of Utah, Logan.
VERMONT.—Thomas Bradlee, University of Vermont and State Agricultural College, Bur-
lington.
VIRGINIA.—J. R. Hutcheson, Virginia Polytechnic Institute, Blacksburg.
WASHINGTON.—S. B. Nelson, State College of Washington, Pullman.
WEST VIRGINIA.—N. T. Frame, College of Agriculture, West Virginia University, Morgan-
town.
WISCONSIN.—{ H. L. Russell, director, } College of Agriculture, University of Wis-
K. L. Hatch, assistant director, } consin, Madison.
WYOMING.—A. E. Bowman, College of Agriculture, University of Wyoming, Laramie.

¹ Revised to July 1, 1924.

² Acting director.

COOPERATIVE EXTENSION WORK, 1923¹

Prepared by the Office of Cooperative Extension Work,

C. B. SMITH, Chief

CONTENTS

	Page		Page
Introduction-----	1	National activities and results—Con.	
Personnel-----	1	Rural engineering-----	19
Office readjustments-----	6	Rodents and miscellaneous in-	
Funds-----	6	sects-----	19
Outstanding developments-----	7	Agricultural economics-----	20
Program organization-----	8	Food and nutrition-----	20
Methods employed-----	8	Clothing-----	20
Psychological basis-----	9	Health and sanitation-----	21
Distribution of demonstrations--	9	Household management and	
Local leaders-----	9	home furnishings-----	21
Services and teaching devices--	10	Statistical summary-----	21
Publications, visual instruction,		Extension work in the Eastern States	21
and radio-----	10	Extension work in the North Cen-	
Methods of cooperation with		tral States-----	35
business interests-----	12	Extension work in the Southern	
National activities and results-----	12	States-----	45
Soils-----	16	Extension work in the Western	
Field crops-----	17	States-----	59
Horticulture-----	18	Statistics-----	74
Livestock-----	18		

INTRODUCTION

The ninth year since the passage of the Smith-Lever Act, May 8, 1914, witnessed no marked changes in the general plan of conducting cooperative extension work. The amount of money appropriated under the provisions of the act reached the maximum set by law during the fiscal year ended June 30, 1923, and no new Federal legislation carrying additional appropriations for cooperative extension was authorized.

The continued unprofitableness of farming in some sections of the country, particularly in the spring-wheat and livestock sections, tended to retard expansion of the work except in a few localities. On the whole, however, in the face of severe agricultural depression, there was a slight increase in the total funds appropriated for extension work from all sources, as well as in the extension staff employed and results accomplished. This is accepted as testimony of the part extension forces are taking in helping farmers and farm families to meet successfully new problems arising from the necessary readjustments in agriculture and home life due to falling prices for farm crops and livestock, high labor and material cost, and high taxes.

The year was essentially one of consolidation of forces and careful attention by Federal, State, and county extension organizations to readjusting funds and personnel in order to increase the effectiveness and volume of extension work. Comparatively few States have found it desirable to make any marked changes in the general plan of conducting extension work. Such changes have, for the most part, been directed toward reducing the size of the State supervisory staff by consolidating duties, by placing the force on a district rather than on a project basis, or by increasing the size of the districts.

PERSONNEL

On June 30, 1923, the entire field service, made up of administrative and supervisory officers, subject-matter specialists, and county workers, numbered

¹ Funds for extension work are appropriated for fiscal years ending on June 30, whereas extension agents are required to prepare their reports for calendar years. For this reason statements of funds expended are given for the fiscal year ended June 30, 1923, and results of work done for the calendar year ended December 31, 1923.

4,472 persons employed on a full-time and 202 on a part-time basis. Of this number 3,412 were permanently located in the counties, 2,310 being in county agent work (fig. 1), 949 in home demonstration work (fig. 2), and 153 in boys' and girls' club work (fig. 3). Those engaged in extension work with negroes



FIG. 1.—Map showing counties (in black) having county agricultural agents, June 30, 1923

numbered 264 (fig. 4). The county workers were assisted in their work by 605 full-time and 202 part-time subject-matter specialists located at the State agricultural colleges. There were 402 persons employed as supervisors and assistant supervisors, and the administrative officers and their immediate as-

sistants numbered 53. Of the 4,567 persons employed, 3,719 were cooperative employees of the Federal Office of Cooperative Extension Work and State agricultural colleges, practically all engaged either in county work, supervision of county work, or farm management demonstrations (fig. 5).

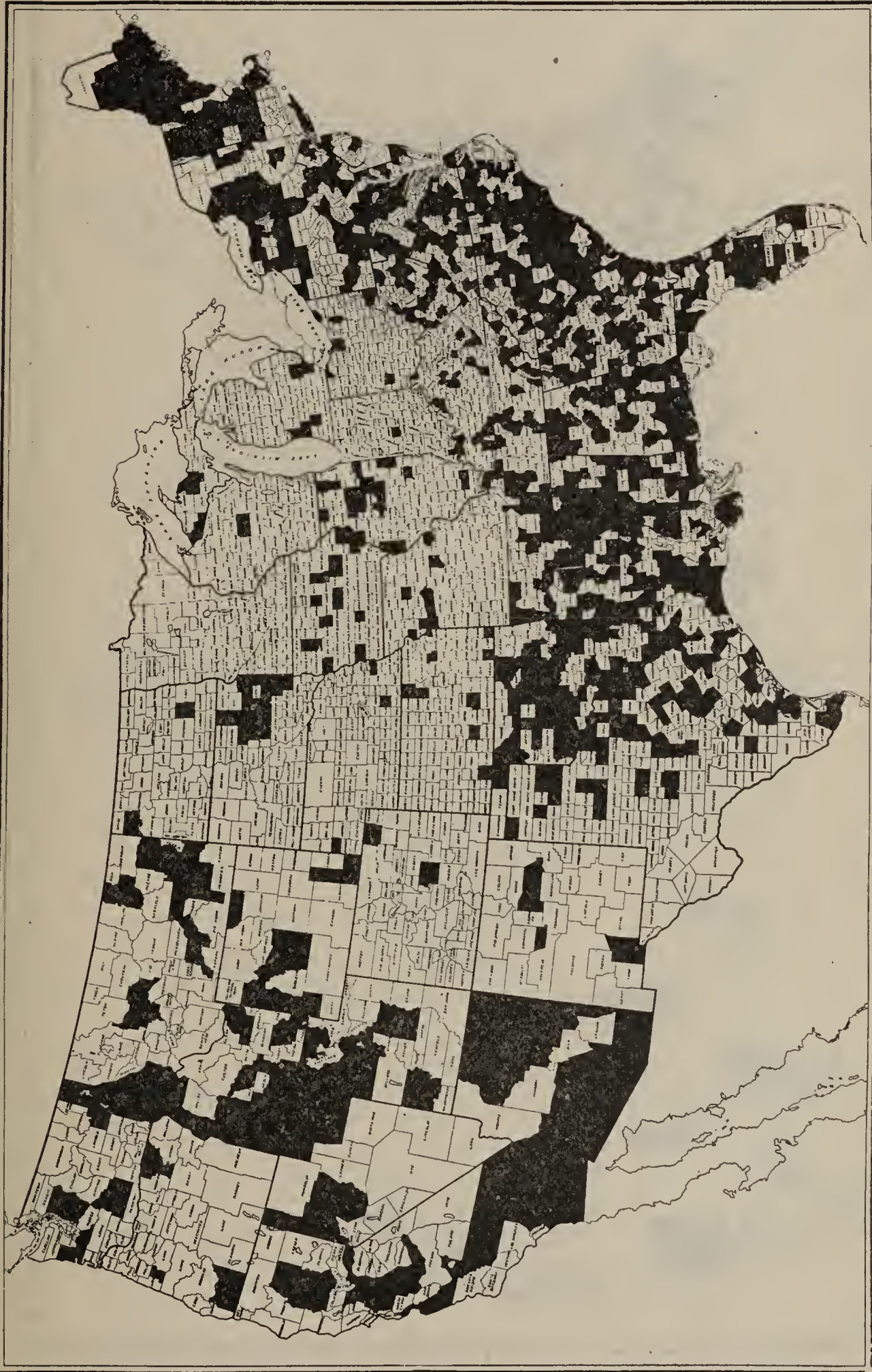


FIG. 2.—Map showing counties (in black) having home demonstration agents, June 30, 1923

The Office of Cooperative Extension Work in the department consisted of 10 administrative and supervisory officers, 12 organization field agents, 10 subject-matter field agents, and a clerical staff of approximately 80 persons.

J. A. Evans was made assistant chief of the Office of Cooperative Extension Work during 1923, while continuing his duties as consulting specialist in southern agriculture with particular reference to cotton.

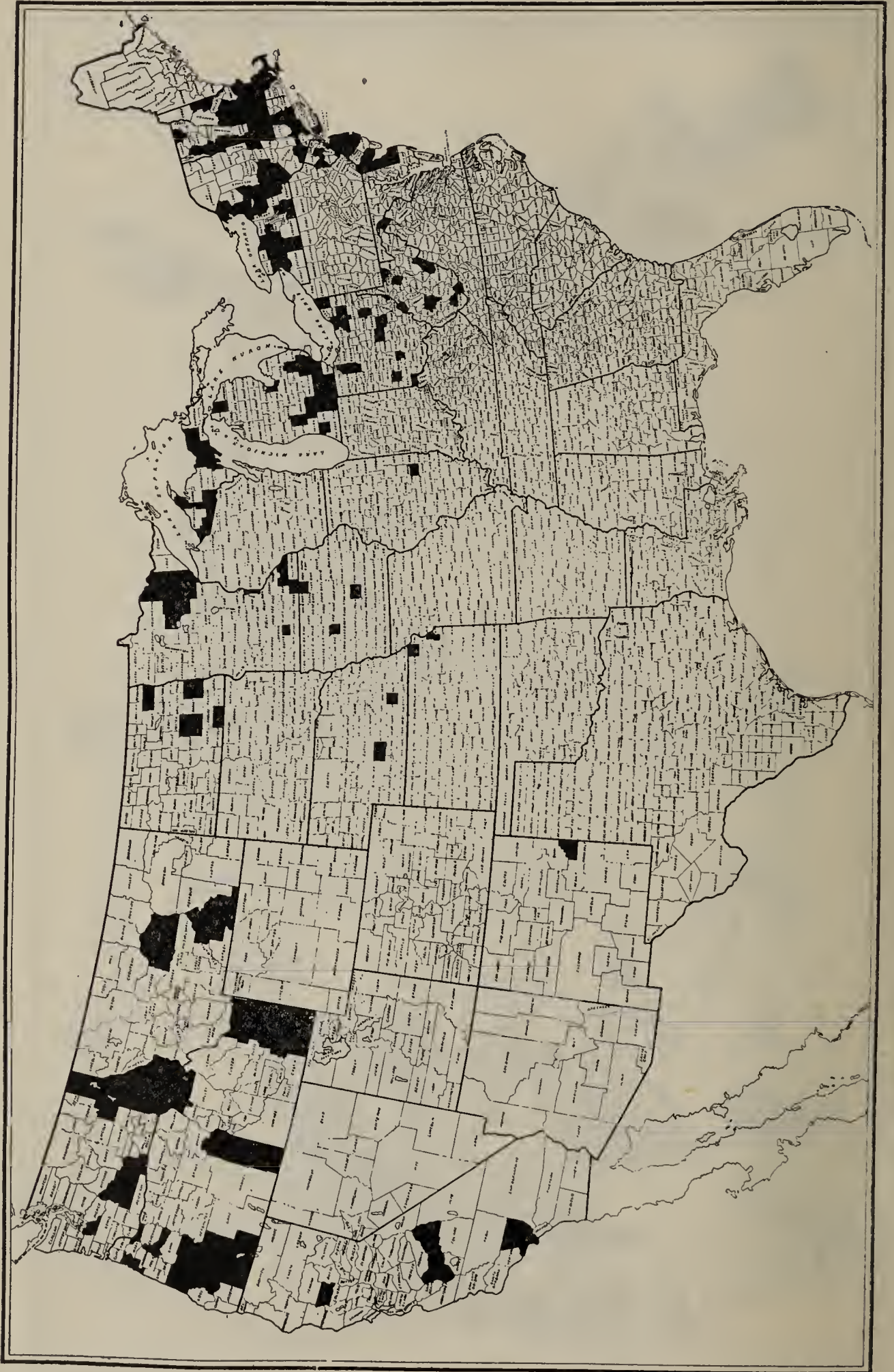


FIG. 3.—Map showing counties (in black) having boys' and girls' club agents, June 30, 1923

Five employees of the Office of Cooperative Extension Work resigned during the year, as follows: W. B. Mercier, H. E. Savely, H. W. Barber, Milton Danziger, and I. L. Hobson. All these positions have remained unfilled, the work being distributed among the remaining members of the office staff.

Changes in extension directors in charge of cooperative extension work have taken place in five States during 1923. On July 1, 1923, C. T. Dowell was made director of extension in Arizona following the resignation of W. M. Cook.

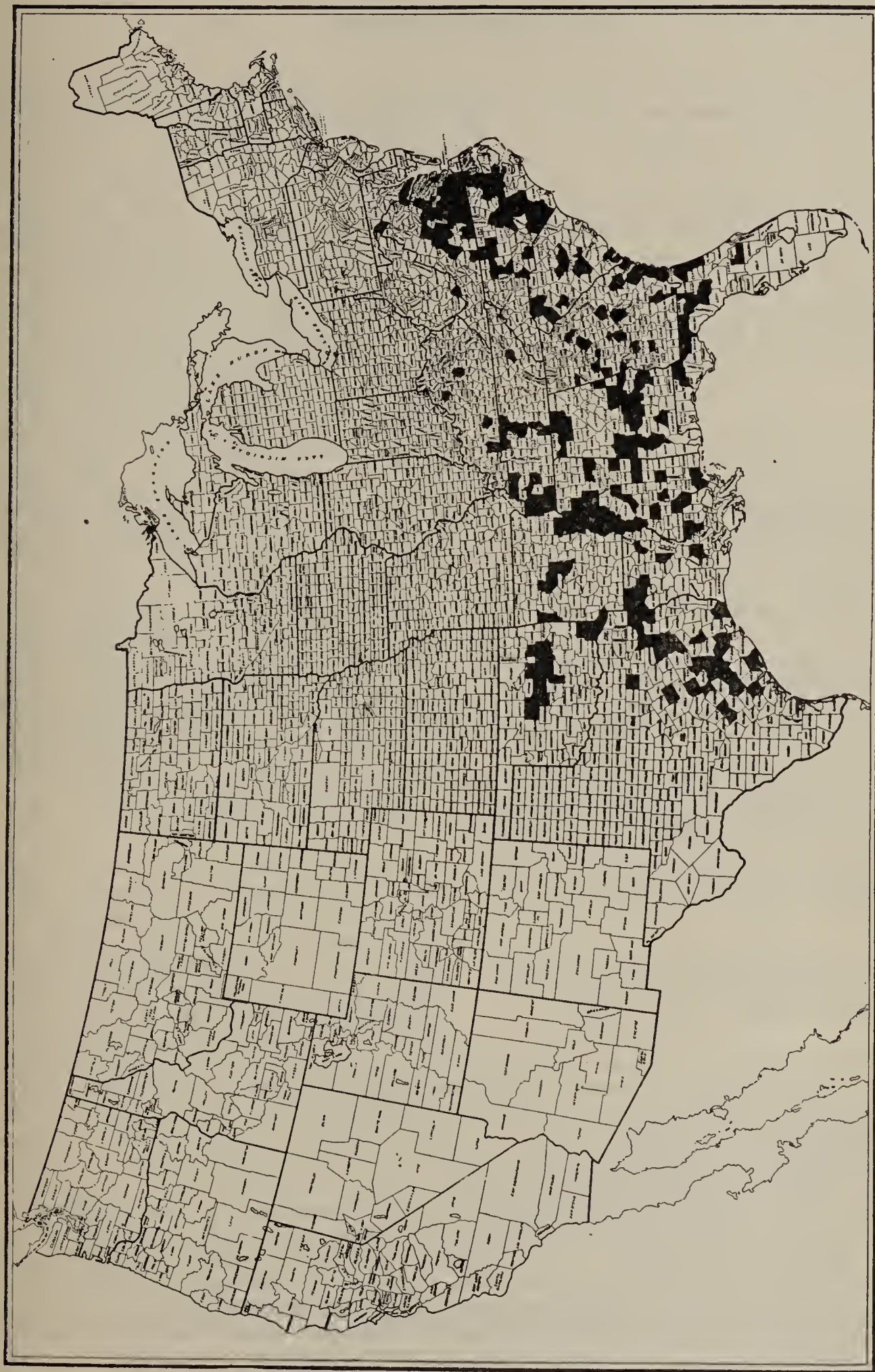


FIG. 4.—Map showing counties (in black) having negro agents, June 30, 1923

Doctor Dowell held this position for one month, and was succeeded by P. H. Ross, formerly county agent leader in Missouri, who was appointed to the position on September 1, 1923. In Arkansas, Director M. T. Payne resigned August 1, 1923, and was succeeded by Dan T. Gray, who became director on January

1, 1924. B. W. Ellis, county agent leader, was appointed director of extension in Connecticut on June 1, 1923, succeeding H. J. Baker, who became extension director in New Jersey June 1, 1923, succeeding L. A. Clinton, deceased. In Idaho, E. J. Iddings succeeded L. W. Fluharty as acting director on October 1, 1923.

OFFICE READJUSTMENTS

With the passing of the States Relations Service on June 30, 1923, the Office of Cooperative Extension Work, as a unit of the newly organized department extension service, became a part of the Office of the Secretary. During the year it was found desirable to make a further readjustment in the internal organization of the office. The number of administrative districts for the country was reduced from five to four. The members of the office staff specializing in methods of organizing and conducting county agent work, home demonstration work, and extension work with juniors, were grouped with the officers in charge of the four administrative districts. These districts are designated as the Eastern States, the North Central States, the Southern States, and the Western States. The duties of the leaders of the work in the regional groups are to represent the Office of Cooperative Extension Work in

dealing with the State extension directors in the determination of State extension programs, and in aiding the States in organizing field agencies to carry out the program thus determined upon. They also aid the office in the handling of Smith-Lever extension budgets and in the inspection of Smith-Lever accounts.

In addition, that portion of the States Relations Service dealing with visual instruction became a part of the Office of Cooperative Extension Work with Reuben Brigham in charge. Mr. Brigham's duties were enlarged to include all the editorial work of the Office of Cooperative Extension Work.

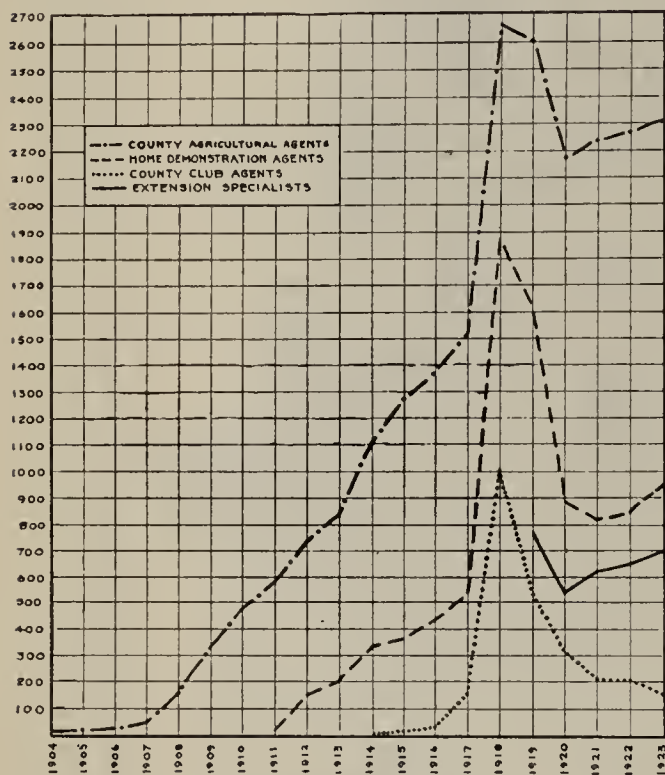


FIG. 5.—Comparative growth in the number of county extension agents, 1904-1923, and of State subject-matter specialists, 1919-1923

or \$5,175,811.94, was derived from State appropriations to the agricultural colleges and other State agencies. The remaining 33 per cent, or \$6,207,954.64, came from county appropriations for extension work and from contributions by local organizations and individuals (fig. 6). More than 94 per cent of all funds used for cooperative extension work in 1923 came from public sources. Of the Federal funds \$5,820,816.89 was provided by the Smith-Lever and other laws supplementary thereto, \$1,242,387.21 from appropriations to the Office of Cooperative Extension Work, and \$345,057.49 from other appropriations to the Department of Agriculture. Of the total funds, 61 per cent, or \$11,465,129.40, was spent in the counties for extension agents; 8.3 per cent, or \$1,559,796.56, was spent at the State agricultural colleges for administration; 10.2 per cent, or \$1,920,278.48, for supervision of county extension forces, and 18.9 per cent, or \$3,539,640.56, for the employment of subject-matter specialists to assist county workers. The remaining 1.6 per cent, or \$307,183.17, was spent in connection with the activities of the Federal extension service located at Washington (fig. 7). A considerable part of the money expended in Washington and at the State agricultural colleges was for penalty envelopes, report forms, circulars, and other supplies consumed largely by county extension workers.

FUNDS

The total funds from all sources used for cooperative extension work during the fiscal year ended June 30, 1923, amounted to \$18,792,028.17. Of this amount 39.5 per cent, or \$7,408,261.59, was contributed by the Federal Government exclusive of the use of penalty envelopes; and 27.5 per cent,

OUTSTANDING DEVELOPMENTS

Among outstanding developments of the year in extension work should be mentioned the increased number of demonstrations to show how to grow at a profit good crops of cotton under boll-weevil conditions. Good cotton crops are grown by means of careful soil preparation, early planting, thick spacing, use of quick-acting fertilizers, and dusting with calcium arsenate. The certainty of these methods in obtaining results is becoming so well known that the average man is beginning to have faith in them, finds them simple in application, and is making more use of them. America's cotton crop would seem, therefore, to be assured for the future, so far as the boll weevil is concerned. Demonstrations in the establishment of permanent pastures in the South likewise occupied much of the time of southern extension forces. Outstanding success followed the use of carpet and dallis grass, and lespedeza is being more appreciated.

In extension work in the Northwestern States emphasis is being placed on diversification, resulting in more pastures, more livestock, more flax, and less wheat. Extension work in the growing of legumes was outstanding during the year, both in Southern and Northern States, and particularly was this true in the principal consuming areas. The work was largely with clovers, alfalfa, and soybeans. Wisconsin increased its acreage of alfalfa about 70 per cent, or 60,000 acres, in 1923, and Michigan from 193,000 acres in 1922, to 350,000 acres in 1923. There were nearly 15,000 demonstrations in the growing of soybeans in 1923, an increase of more than 80 per cent over the year 1922.

In the livestock field, national results reflected somewhat the depression in the market for livestock products, although extension activities in both dairying and poultry production increased. It is estimated that on 315,569

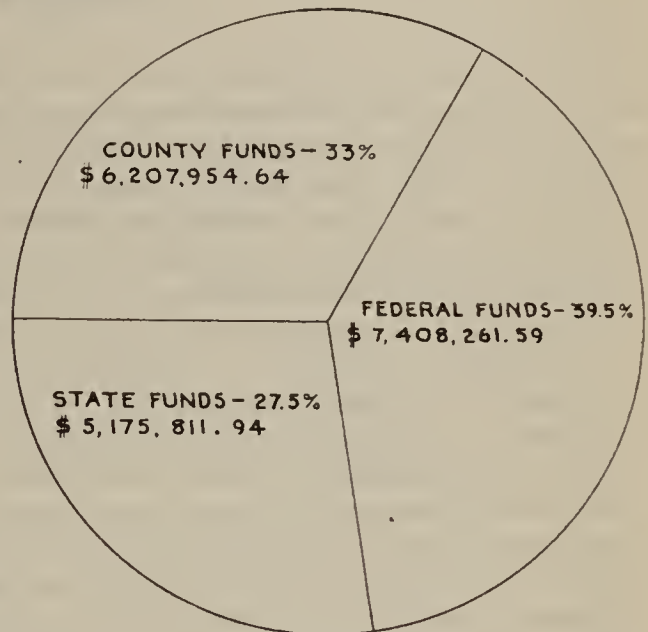


FIG. 6.—Sources of all funds used for cooperative extension work during the year ended June 30, 1923

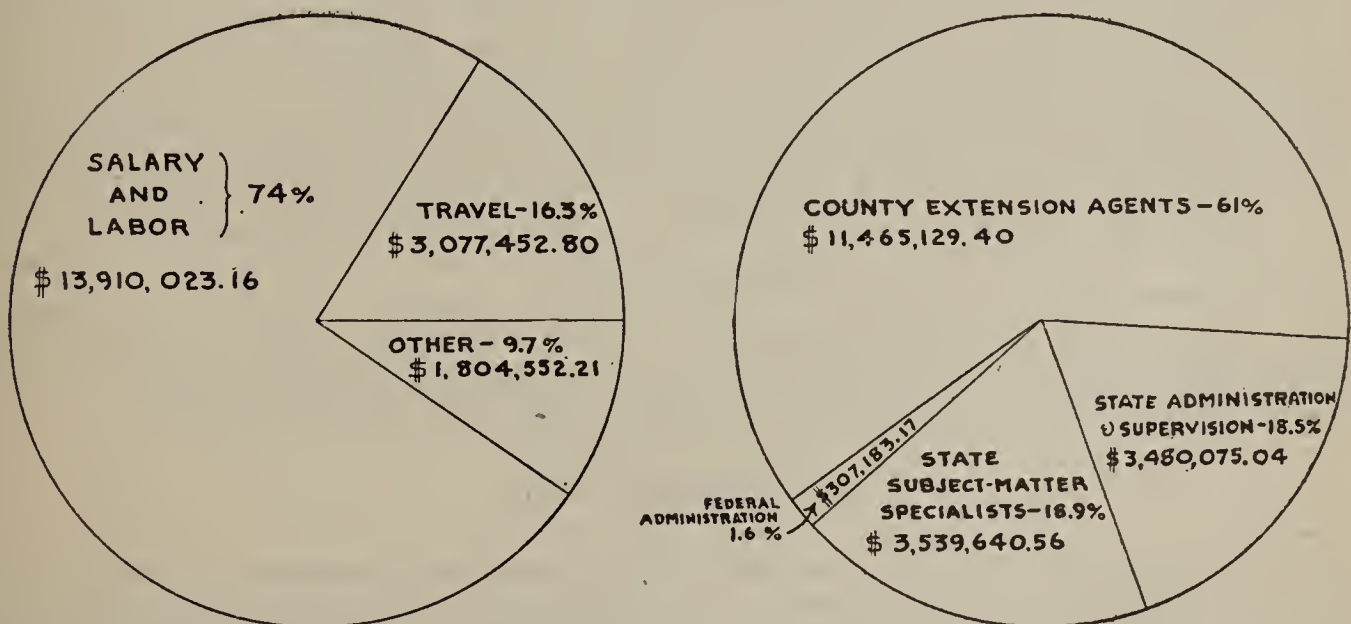


FIG. 7.—Expenditures of all funds used for cooperative extension work during the year ended June 30, 1923

farms improved dairy practices were adopted, and that better methods of poultry management were employed on 309,719 farms as a result of extension activity, the latter resulting in part from more than 50,000 demonstrations carried on by boys and girls enrolled in poultry clubs.

Throughout the country the proper nutrition of the farm family and provision for adequate sources of milk, meat, fruits, vegetables, and cereals and

for their proper use were emphasized with practical effect by extension workers. The improvement of working conditions in the farm home through the rearrangement and better equipment of the farm kitchen was much in evidence due to successful kitchen-improvement contests and similar activities among farm women. Consistent progress was made in developing sources of farm-home income through the sale of standardized canned and preserved products, poultry and eggs, milk products, and the products of other home industries.

PROGRAM ORGANIZATION

Experience has shown the need of better organized programs of extension work and a better understanding among all people and agencies of the States as to what these programs are and how they may all work together toward a common end. The usual plan followed is for the college of agriculture co-operating with the extension director to assemble in each of its departments the facts regarding each major crop and livestock interest, then to invite into the college representatives of various farmers' organizations, rural bankers' and business men's associations, to consider in the light of the facts what kind of extension program is most desirable in the State. Representatives of the Office of Cooperative Extension Work have been welcomed as participants in many of these State conferences, which have been held in a number of States, including Illinois, Minnesota, Mississippi, Oregon, Ohio, and Virginia.

In this connection mention needs to be made of the regional extension conference of the Western States, held at Fort Collins, Colo., in November, 1923, at which consideration was given to developing in an organized way a regional program of extension work in certain phases of agriculture and home economics that are of common interest to the western group of States. Projects on range livestock, dairying, and human nutrition were selected to be included in the program. To this conference of extension workers were brought the results of the research work at the U. S. Department of Agriculture and the State agricultural colleges and experiment stations that were ready for extension. All available facts regarding range livestock, dairying, and human nutrition were assembled. Committees then digested this material and based upon it an extension program,² which was offered for consideration³ as something for western extension forces to work toward in the development of agriculture and home economics.

In addition to the western conference, three other regional conferences were held during the year. The one held at Memphis, Tenn., in February, 1923, was attended by State extension directors and by State leaders of farm and home demonstration work of 12 Southern States. During the same month an Eastern States conference was held in New Haven, Conn., devoted primarily to the work of extension specialists in forestry and vegetable gardening, and to junior extension work. The North-Central States conference, held in Chicago during March, was attended by State extension directors, farm management specialists, home-economics specialists, and leaders of 13 North-Central States.

Such regional conferences are proving a very helpful influence in crystalizing ideas as to effective methods of doing work and rapid spread of better methods from State to State. Those lines of work in which the extension leaders have been given opportunity to meet with like representatives from other States and the Federal Department of Agriculture from time to time tend to be the best organized and to result in larger accomplishment.

METHODS EMPLOYED³

Much of the time of administrative and supervisory officers in the earlier years of extension work was used in officering and financing the extension machinery. With the maturity of the Smith-Lever Act and consequent slowing up of expansion, increasing attention has been given to the methods concerned in extension processes.

² U. S. Dept. Agr. Circ. 308, An extension program in range livestock, dairying, and human nutrition for the Western States.

³ Acknowledgement is made to A. B. Graham, in charge of the division of subject-matter specialists, and to Reuben Brigham, in charge of the visual instruction and editorial section, for the preparation of material on pages 8 to 12.

PSYCHOLOGICAL BASIS

It is noted from reports of extension work in 1923 that more attention was given to the nature and type of thinking done by the great mass of people to whom the extension appeal is being made. Evidence of this fact is found in the systematic use of newspaper articles, fair exhibits, motion pictures, slides, songs, and slogans to attract attention and to arouse interest; in the use of printed circulars, bulletins, tours, and field meetings to further interest and to establish confidence; and in the use of the lecture, demonstration exhibits, and various other types of manual demonstrations to bring about desire and decision for the adoption of improved practices on the part of farming people.

Lessons to be impressed by demonstrations were repeated throughout the year in order to interest the same group again and again. This has been done by presenting the idea in a slightly different manner and the demonstration in a more advanced stage than at the preceding meeting. For example, certified seed potatoes may have been used at planting time as the beginning of a demonstration, a field meeting called during the growing season to impress farmers with the vigorous growth of the potatoes, and another field meeting called at or near digging time to observe the results. At about this time an automobile tour may have been made to 10 or 15 places where certified seed had been used, to see results and learn of the variations, and finally an exhibit made at community, county, or State fair of the results of using certified seed. Between each of these events there may have been employed news items, personal letters, and cards showing photographs of fields where certified seed had been used to give continuity to the thought and to keep the lesson in the minds of the farmers to whom the appeal is made. Following the exhibits, lantern slides, lectures, and even motion pictures may have been used to show the method of raising certified seed.

The same plan in principle was carried out in the nutrition work with both adults and children. Demonstrations were made, measurements and weights were determined, publicity was given to the results of nutrition work, exhibits of meals and meal planning were made at fairs, parodies on rhymes were written for children, and various other things were done to keep the idea of a wholesome or corrective diet before them.

DISTRIBUTION OF DEMONSTRATIONS

The average distance that people will travel to see a demonstration seems to vary from 3½ miles in the more densely populated parts of the country, to 10 and 15 miles in the less densely populated parts. A few States have made a study of the distribution of demonstrations within the county and within the community in order to determine where demonstrations may be located so that the natural travel of people would make it easier for them to attend, or where they would be more likely to become participants. Such studies carried on in 1923 in Ohio and Iowa resulted in a more even distribution of demonstrations and in the use of a greater variety of agencies.

LOCAL LEADERS

Extension workers are too few in number to reach the majority of farms and farm homes personally. Reports indicate that they are placing dependence increasingly on giving some one or more persons in each community in each of the various lines of work the needed message, so that these persons in turn may spread the teachings to their neighbors. As in a college having 2,000 to 2,500 students there is a teaching corps of 250 to 300 teachers and assistant teachers, so in a county with a like number of farmers the extension forces must supplement their own efforts by the use of voluntary assistants, usually called local leaders or key demonstrators. The use of such a plan of disseminating the lessons from a demonstration has required that complex demonstrations be broken up into their elements, and that one essential and outstanding element be demonstrated for the benefit of the group of leaders who are to pass on to others what they have been taught. The number of local leaders in 1923 approximated in all lines of work 182,350. This group of voluntary leaders contributed a total of 482,159 days' work to the extension service during the year, or the equivalent of approximately 1,600 men and women working a year each, thus greatly augmenting extension work.

Through local leaders, the county extension agent and the specialist at the agricultural college have been able to get reports indicating the spread of practices demonstrated, and also some idea as to the spread of the influence not directly attributable to the work of either the county extension agent or local leader.

This plan gives additional help to the county extension agent in stabilizing his work and in giving to every feature, whether field meeting, home meeting, tour, exhibit, or lecture, a definite place in a program in support of the projects in the community or within the county.

SERVICES AND TEACHING DEVICES

During 1923 steps were taken to make advance distribution among the extension forces of information, prepared by the Bureau of Agricultural Economics, concerning crop conditions, intentions to plant or to breed, forecasts of weather in nontechnical language for fruit and vegetable growers, news of livestock receipts and prices on the large cattle markets, forecasts of the probabilities of insect infestation, imports and cold-storage holdings of farm products, and general presentation of the agricultural situation. The transmitting of these various kinds of information was by telegraph to newspapers and county extension offices, from which they were further disseminated locally. In 1923 the radio began to take its place as a supplementary means for such information.

Extension specialists in entomology advised farmers in the winter-wheat growing States as to the fly-free date for sowing. Many outstanding examples may be found in Ohio and other States where the sowing of wheat after fly-free date has eliminated the attacks of the Hessian fly.

Among devices for assisting the judgment has been the use of score cards setting forth certain values or points indicating the weight of features of an attainable standard. This device has been applied to communities as well as to individuals. Its application has revealed certain features in agriculture, schools, roads, and social life which otherwise would not have been brought out so strikingly. It has been used in the setting up of certain health standards, meal or diet standards, height-weight relationships, and kitchen conveniences. In any one of these applications it has shown certain divergencies from the standard, the judgment has been quickened as to the importance of rectifying the apparent error, or certain modifications have been made because of the impressiveness of the difference between a present condition and a standard of measure.

In extension teaching, certain devices were reported as being used with great effectiveness. Among these were illustrated posters, slogans, songs, mock trials, pageants, and plays. It was found that slogans with a meter and perhaps a rhyme, present a central thought in a way not easily forgotten. For instance, an effective canning slogan used was "From the patch with dispatch."

Songs, such as "We'll grow our own supplies," when sung to familiar tunes, were reported as being very successful among the colored people of the South in stimulating enthusiastic response to extension teaching.

In mock trials, a bit of humor and the fact that it is a mock procedure put the mind in a playful mood to receive and be impressed by that which is usually very serious. Two of these mock trials used effectively in 1923 were the trial of the scrub bull and of the farmer who robs the soil.

Pageants have been used to attract the attention of large groups to some outstanding accomplishments or lessons in demonstration work or to give something of historic setting or background to present-day accomplishments. Plays such as are used in the "milk-for-diet" campaigns, especially those in which young children represent fairies, are particularly useful in appealing to the imagination of children as well as of adults. The naming of projects, such as "Keep growing" in the diet demonstrations for children, is a device which appeals more to both adults and children than a more seriously worded title, such as "Corrective diet."

PUBLICATIONS, VISUAL INSTRUCTION, AND RADIO

Reports of extension work in 1923 indicate progress in the use of publications, news service, visual instruction, and radio. Recognition of the growing interest among field workers in the use of these mediums for reenforcing extension effort was given by the Office of Cooperative Extension Work

through the organization of the visual instruction and editorial section of the office. This section, in addition to giving attention to the editorial and illustrative work of the Washington office, was charged with making available to its cooperative field employees material and data from the department relating to visual instruction, publications, radio, photographs, lantern slides, charts, and other illustrative material. Through this section service along these lines, hitherto given to its field workers by the office during the existence of the States Relations Service, was consolidated and continued without interruption.

Consistent progress was made in the improvement of publications prepared and distributed in the furtherance of cooperative extension work as regards presentation of subject matter, make-up, and illustrations. During 1923 there were published by the State extension divisions, in the interest of extension work, 1,293 printed documents, consisting of 255 bulletins, 353 circulars, and 685 miscellaneous publications. There were prepared and printed by the Office of Cooperative Extension Work a report on cooperative extension work in agriculture and home economics, 1921, and department circulars as follows: Status and results of boys' and girls' club work in the Northern and Western States, 1921; Status and results of home demonstration work in the Northern and Western States, 1921; Status and results of extension work in Southern States, 1903-1921; and Statistics of cooperative extension work, 1922-23.

In each of the 48 States, the State extension division made provision for the preparation and distribution to city, rural, and farm press of news material relating to extension work in agriculture and home economics. Increased thought and study was given to the preparation of such material by extension workers generally. In several States the extension editor visited selected counties and effectively aided county extension agents by suggesting how to prepare for press use information supplementing local extension work and how to obtain satisfactory contacts with local press mediums, as part of a definite publicity program in connection with the major projects. In the preparation of information on agricultural extension work from a national viewpoint, the Office of Cooperative Extension Work cooperated with the department press service in assembling and preparing 342 articles on various phases of extension work for the official record and for press releases.

The general tendency in educational work to use illustrations in increasing numbers in printed bulletins and circulars, with articles submitted for press use, and in other ways, was evident in the extension field in 1923. In a number of States more definite steps were taken to encourage county extension agents in taking better photographs and to have the professional photographer at the State agricultural college, if one was employed, undertake a special trip or trips to selected counties to take series of definitely planned photographs relating to extension work. A total of 1,862 field and 104 laboratory photographs were taken for the Office of Cooperative Extension Work in cooperation with State extension divisions in 1923, and, to a limited extent, personnel was provided to give instruction at extension conferences in methods of extension photography. More than 26,000 prints, slides, enlargements, charts, posters, and drawings were requested and prepared for use in extension work by the Office of Cooperative Extension Work, and 818 sets of lantern slides prepared in series and accompanied by supplementary outlines on 63 different subjects were loaned for extension use through State directors of extension.

There was a general increase in the use of motion pictures among extension workers during 1923. Plans for their effective use in extension work were made, accompanied by a more systematic effort to develop sources of educational films and to provide satisfactory facilities for portable projection. The department Office of Motion Pictures filled requests for 3,163 educational films on agricultural and home-economics subjects from extension workers during the year. The department produced 35 new motion pictures, including five illustrating cooperative extension work which were prepared in cooperation with the Office of Cooperative Extension Work, as follows: A Letter to Dad, Bill Jones—Champion, Birds of a Feather, Anchored Acres, and Seeing Washington.

The preparation and demonstration of exhibits representative of extension work at State, county, and community fairs continued to occupy to a large extent the time and efforts of extension workers. These exhibits as a whole showed considerable improvement in quality, construction, and effectiveness of presentation. In the cooperative extension field, the department, through the Office of Exhibits and the Office of Cooperative Extension Work, cooperated with

State extension divisions in the Eastern and North Central States in staging regional boys' and girls' club exhibits at interstate fairs at Springfield, Mass., Sioux City, Iowa, and at the National Boys' and Girls' Club Congress, Chicago Ill.

The use of the radio in broadcasting agricultural information was given considerable study by extension forces in a number of States. Regular or occasional participation by extension workers in programs broadcasted by commercial stations was arranged for in a number of instances. In some States broadcasting stations installed at the State agricultural colleges and affiliated institutions were utilized in sending out extension programs. Twenty-four States having such stations at the close of 1923 were as follows: Alabama, Arkansas, Arizona, Connecticut, Georgia, Indiana, Iowa, Kansas, Louisiana, Michigan, Minnesota, Missouri, Nebraska, New Mexico, New York, North

Dakota, Ohio, Oregon, Pennsylvania, South Carolina, South Dakota, Texas, Washington, and Wisconsin. Data obtained from a questionnaire issued cooperatively by the Bureau of Agricultural Economics and the Office of Cooperative Extension Work of the department regarding the use and value of the radio in extension work, which was sent to all county agricultural agents, showed that of 1,200 agents making replies, 86 had radio receiving sets and 488 had access to radio receiving sets. Of those having radio receiving sets or having access to such sets more than 80 per cent were able to get satisfactorily market

RAISE HEALTHY CHICKS -

Corrosive Sublimate
is valuable for
disinfecting brooder houses and yards.

We carry it in powdered form
put up in the size package you need.
It is cheaper by the pound.

WISHWELL, The DRUGGIST

and weather reports of the department. From data obtained from the questionnaires, it is estimated that about 145,000 farm families were using radio receiving sets in 1923.

METHODS OF COOPERATION WITH BUSINESS INTERESTS

Cooperation with business interests has been largely through making business men acquainted with and taking them into the counsels of the farm home and agricultural educational organizations. Seed growers, fertilizer manufacturers, producers of strychnine for the poisoning of rodents, manufacturers of barium carbonate for killing rats, manufacturers of powdered milk, and many others have contributed their resources in making possible a greater income and more satisfaction in the rural home. Business firms, such as druggists who handle insecticides and fungicides, have made displays in their windows. Hardware and implement dealers handling approved spray outfits and nurserymen raising fruit trees and ornamental plants have planned exhibits to harmonize with county extension plans in this field. Lumber dealers have given out plans for poultry houses and for self-feeders for hogs and chickens. Furniture and hardware dealers have made exhibits at county fairs of such a nature that the plans of the home demonstration agent have been brought to the attention of the people. Local business men, on being apprised of the necessity for various kinds of stock to carry out the plans of the county extension agent and the subject-matter specialist, have worked out unique advertisements for the local newspapers such as the one shown on this page.

NATIONAL ACTIVITIES AND RESULTS ⁴

The results of cooperative extension work as reported by all county extension agents and other field workers are annually tabulated and summarized by the Office of Cooperative Extension Work in its section of reports and efficiency studies. This section also indexes the narrative reports of all field agents, including supervisors, specialists, and county agents. Thus, anyone in the extension service or outside of it desiring to know what has been done in any State or county with any crop, livestock, agricultural product, or rural interest by any or all of the cooperatively employed extension agents, can find out by inquiry through this section.

⁴ Acknowledgment is made to M. C. Wilson, in charge of the section of reports and efficiency studies, for the preparation of material on pages 12 to 21.

In order to coordinate the information on extension activities and results reported each year by the county extension agents a single annual statistical report form was developed early in the year and was used by all county extension agents in 35 of the States in making their 1923 annual reports. A modification of this form was used by all the county extension

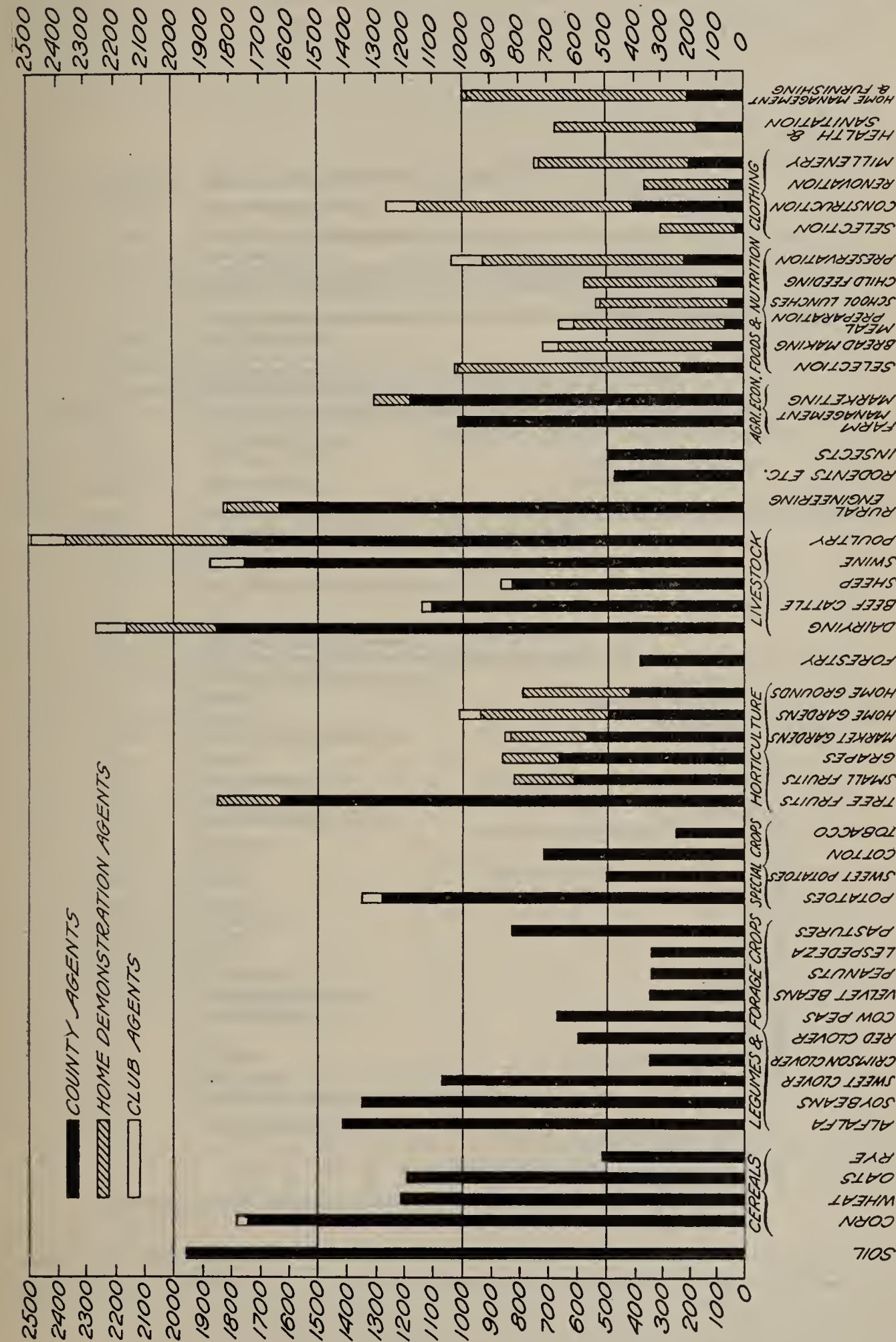


Fig. 8.—Number of county extension agents reporting extension work in the various subject-matter lines of work in 1923

agents in the remaining 13 States. This revised report form has resulted in more nearly comparable information on extension work throughout the 48 States being obtainable from the 1923 annual reports than ever before. In prosecuting the extension program outlined for 1923 (fig. 8), the extension agents associated with them 182,350 local leaders. A total of

1,034,032 persons were members of county extension organizations and adult clubs. Junior clubs to the number of 32,673, with an enrollment of 459,074 boys and girls, were also organized around the extension program. County extension agents visited personally 609,887 different farms and 222,132 different homes. Nearly 4,000,000 office and telephone calls were received and nearly 3,500,000 letters were written in reply to requests for information. More than 16,000,000 persons were reached in the 420,737 meetings arranged for or participated in by the county workers.

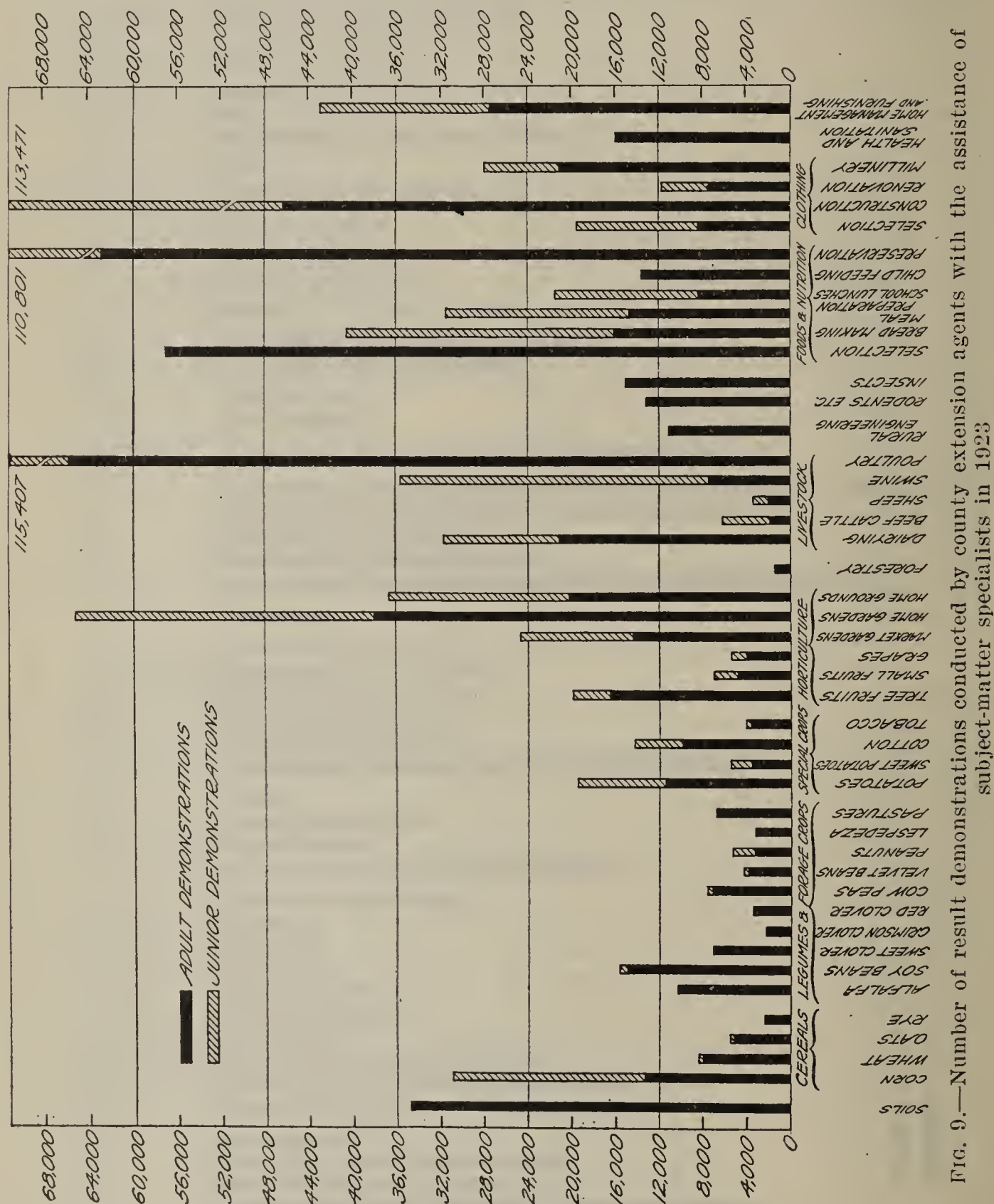


FIG. 9.—Number of result demonstrations conducted by county extension agents with the assistance of subject-matter specialists in 1923

Adults carried out 721,448 completed demonstrations, and 428,746 completed demonstrations were conducted with juniors (fig. 9). A total of 5,462,526 farmers or home makers were reported as having adopted new or improved practices through the influence of the extension forces (fig. 10).

County agent work.—The 2,310 county agricultural agents carried on organized extension work in 23,213 communities and were assisted in such work by 125,071 volunteer leaders. Demonstrations numbering 282,395 were carried on with adults and 128,705 with juniors. Agricultural agents influenced, more or less directly, 3,860,437 farms or homes to adopt better agricultural or home-economics practices.

Home demonstration work.—Organized extension work was carried on by the 949 home demonstration agents in 13,377 communities. Through the influence of 438,099 result demonstrations with adults and 254,006 with juniors, 1,546,256 home makers adopted improved practices in connection with the various activities centering in the home.

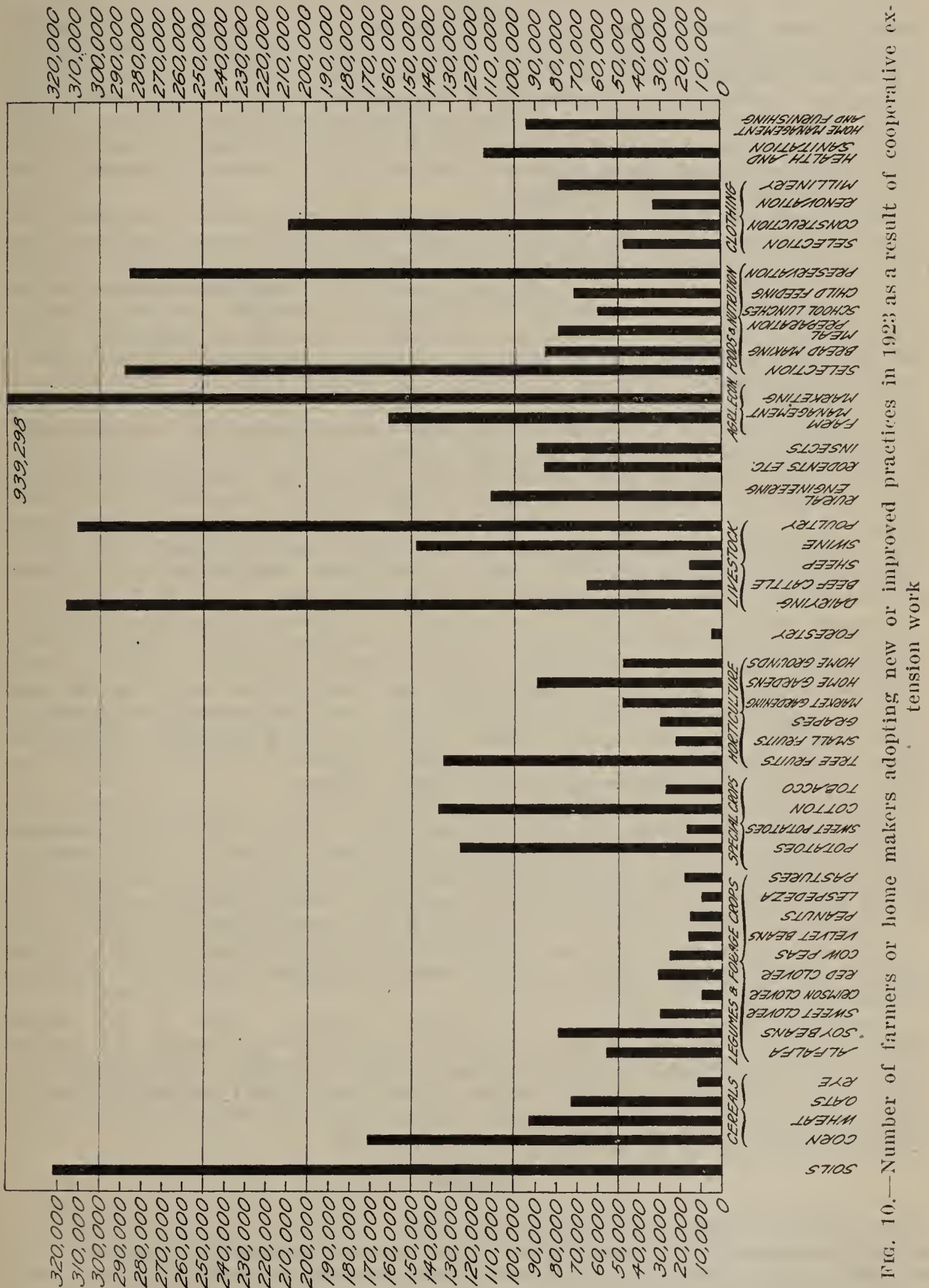


Fig. 10.—Number of farmers or home makers adopting new or improved practices in 1923 as a result of cooperative extension work

Boys' and girls' club work.—In 1923, 459,074 boys and girls were definitely associated with extension work and 54 per cent of them carried their work to completion. Of the 722,508 projects undertaken by these boys and girls, 428,746, or 59 per cent, were finished. This was an increase of 70,656 over the number of projects completed by boys and girls in 1922. As in previous years,

the corn, potato, cotton, vegetable gardening, dairy, poultry, swine, food preparation, food preservation, and clothing projects received greatest emphasis with juniors as measured by the number enrolled. Of the 3,338 county extension agents submitting annual reports, 2,747, or 82 per cent, mentioned work with juniors.

Subject-matter specialists.—Including part-time employees, a total of 803 specialists in the various subject-matter lines of work were employed on June 30, 1923. This number was the equivalent of 700 subject-matter specialists employed on a full-time basis, of which 80 were engaged in agronomy, 68 in animal husbandry, 80 in dairying, 69 in poultry, 64 in horticulture, 25 in entomology (including bee culture), 19 in plant pathology, 5 in forestry, 4 in rodent control, 35 in rural engineering, 48 in farm management, 34 in marketing, 7 in rural organization, 8 in veterinary, 51 in general home economics, 37 in clothing and millinery, 38 in foods and nutrition, 20 in home management, and 8 in movable schools and institutes.

Negro extension work.—The 264 negro men and women agents obtained the active cooperation of 14,367 leading colored farmers and farm women in carrying out the local extension program developed in 2,965 communities. A total of 847,078 people were reached through meetings. Completed demonstrations numbering 107,678 were conducted with adults, and 69,917 completed demonstrations with juniors. Through the influence of the negro extension agents, 388,558 farms or homes took up some of the better practices recommended.

Farmers' institutes.—During the fiscal year ended June 30, 1923, farmers' institutes were officially conducted in 22 States. In a few other States they were held locally and independently without a coordinating or directing agency covering a larger territory than the county. In 15 of the 22 States systematically conducting farmers' institutes during the year the work was supervised through the extension division of the college of agriculture as one branch of its activities. In six of the other seven States, together with Iowa, which employed both methods, farmers' institutes were supervised through the State department of agriculture; and in Illinois they were supervised through an independent State department of farmers' institutes.

Farmers' institute activities in the extension divisions of the colleges of agriculture have not changed materially from those of the previous year, either in management, character, or quantity. The 15 States report a total of 2,301 institutes lasting 3,530 days, comprising 7,836 sessions, at which 981,795 persons were in attendance. Instruction was given by 505 persons, of whom 275 were from the extension staff. These meetings cost \$136,110.45 divided between special State appropriations amounting to \$80,661.02 and \$55,449.43 contributed by private individuals or from county funds.

Those States where the farmers' institutes were managed by the State departments of agriculture show an increase over 1922 in the amount of funds used, the number of institutes held, the number of days involved, and the number of sessions held. There were in 1923, a total of 1,618 institutes so supervised, lasting 2,061 days and comprising 3,151 sessions, at which 437,298 persons were in attendance. In these institutes, 436 instructors were employed, 101 of whom were from the extension divisions of the colleges of agriculture. These meetings cost \$61,843, all except \$2,000 of which was from special State appropriations for this work.

Approximately two-thirds of the farmers' institute work in the United States is now in charge of the extension division of the colleges of agriculture, where it constitutes a branch of their regular activities varying greatly in quality and in quantity in the several States with local circumstances. A detailed statement of farmers' institute activities during the fiscal year ended June 30, 1923, is given in Tables 13 and 14, page 83.

SOILS ⁵

In 48 States 1,980 county extension agents reported work in soil fertility. Result demonstrations amounting to 34,550 were completed or carried through the year, and 323,009 different farmers were reported as having adopted better soils practices during the year. A total of 170,059 farmers followed the advice of the agents in the use of commercial fertilizers and 63,719 in the use of lime and limestone; 60,743 took better care of farm manures, and 57,429

⁵ Drainage, irrigation, terracing, and land clearing are reported under rural engineering.

began the practice of plowing under green-manure crops to increase soil fertility.

The use of high-analysis fertilizers and the development of local sources of lime were particularly emphasized to lessen the cost of transportation.

FIELD CROPS

The use of improved or certified seed and the control of insects and diseases by seed treatment or spraying received increased emphasis during the year. The growing of leguminous forage for livestock in order to curtail the use of high-priced concentrates was also an outstanding feature of the work with crops.

The number of demonstrations with legumes and forage crops—66,261—reported by 1,067 agents in 47 States, is an increase of 65 per cent over the preceding year. A total of 31,286 adult result demonstrations with cereals were conducted by 1,311 agents in 47 States, which is a slight increase over 1922. In the case of special crops, such as potatoes and tobacco, there was little increase in the amount of work reported, but the number of demonstrations with cotton nearly doubled.

Corn.—Agents conducted with adults 13,153 result demonstrations in all phases of corn growing, and 17,293 boys and girls completed the work prescribed for them in the corn project. A total of 171,080 farmers was reported by 1,789 agents as having adopted improved corn practices during the year, 112,561 as having planted improved strains of seed, and 39,185 as having tested seed corn for germination prior to planting.

Wheat.—During 1923, 1,227 agents reported 8,025 completed demonstrations and 94,305 farmers adopting better practices in wheat growing as a result of extension work. Improved varieties or strains of wheat were sown on 52,909 farms, and 37,443 farmers treated seed for smut.

Oats.—Extension workers influenced 74,425 different farmers to change their practices in raising oats, 40,475 to treat oat seed for smut, and 30,531 to sow improved or selected seed. Extension agents conducted 5,295 result demonstrations.

Alfalfa.—Greatly increased attention was given the alfalfa crop during the year. In 1923, 1,427 agents reported 10,354 demonstrations, and 56,355 farmers were influenced to adopt better practices in handling alfalfa. The sowing of improved, hardy strains of seed was practiced on 27,196 farms.

Soybeans.—Extension agents reported 14,914 demonstrations with soybeans and 79,824 farmers modifying practices in soybean growing during 1923. This is an increase in practices modified of approximately 40 per cent over the preceding year. Improved seed for planting was procured by 33,455 farmers, and 37,765 inoculated the seed or soil with bacteria before planting.

Sweetclover.—Interest in sweetclover continued to increase rapidly, as shown by the 7,090 demonstrations conducted, an increase of nearly 90 per cent over 1922, and by the 30,123 farmers adopting better practices in growing this crop. Improved seed for sowing was procured by 12,300 farmers, and 11,149 inoculated the seed or soil before planting.

Cowpeas.—Work with cowpeas was reported by 680 agents, who conducted 7,117 demonstrations, and obtained the adoption of improved practices on 24,599 farms.

Other legumes.—Comparable work was also reported with red clover, crimson clover, field beans, lespedeza, peanuts, and other leguminous crops grown in the various parts of the country.

Range and pasture.—In all the livestock sections of the country interest is being aroused in providing better pasture facilities. In 1923, 6,737 demonstrations were conducted, and 19,205 farmers were influenced to accept improved methods of establishing or handling pastures.

Potatoes.—Improved seed and the control of diseases and insect pests were the principal phases of potato growing emphasized by the extension forces in 1923. Agents conducted 11,549 result demonstrations with adults, and 7,830 juniors completed their potato projects, while 125,401 different farmers were influenced to practice better methods of handling the potato crop. Certified or selected seed was planted by 60,065 farmers, 39,629 treated seed for disease, and 64,542 practiced better methods of spraying or dusting to control disease and insect pests.

Sweet potatoes.—In addition to the work with potatoes, 3,527 adult demonstrations and 1,846 junior demonstrations were conducted with sweet potatoes.

A total of 17,810 farmers were influenced to change their methods of handling this crop.

Cotton.—There was a marked increase in all phases of extension work with cotton as compared with 1922. This is the natural result of increased prices for cotton and the extension of the area affected by the boll weevil. During 1923, 9,820 adult demonstrations were completed, as compared with 6,477 in 1922, and 4,459 boys and girls completed their cotton-project work in 1923, as compared with 1,819 in 1922. In all, 136,239 farmers were taught better cotton practices, as compared with 51,821 in 1922. A total of 60,077 farmers planted selected cottonseed, and 63,542 sprayed or dusted to control insect pests.

Tobacco.—Demonstrations numbering 3,570 were conducted in the various phases of tobacco culture. Extension workers assisted 17,426 farmers in controlling diseases and insect pests and influenced 26,473 to adopt one or more improved practices in growing tobacco.

HORTICULTURE

The use of fertilizers, pruning, and spraying or dusting to control diseases and insect pests continued to be emphasized. In several States special spray services were conducted. Assistant county agents trained in plant pathology and entomology were employed in the important fruit areas and plans perfected whereby all interested fruit growers were furnished with detailed information on when and how to spray. Special weather-forecasting service for use in this connection was provided by the Weather Bureau.

Tree fruits.—Extension work in orcharding was reported by 1,866 agents, who conducted 16,362 adult demonstrations. Junior demonstrations were completed by 3,375 boys and girls, and 134,109 different farmers adopted better orchard practices. Improved methods of pruning were adopted on 65,878 farms, while 80,884 farmers followed better methods of controlling diseases and insect pests.

Bush and small fruits.—A total of 4,985 adult demonstrations and 2,250 junior demonstrations were conducted with bush and small fruits. Better practices were adopted by 23,135 farmers or home makers, 10,112 of whom followed better methods of controlling insect pests and diseases.

Grapes.—Work outlined in grape culture was completed by 1,420 boys and girls. A total of 3,871 adult demonstrations were completed and 28,947 different farmers adopted improved practices, 17,964 followed better methods of pruning, and 10,619 better methods of controlling diseases and insects.

Market gardening.—Tomatoes, lettuce, celery, melons, peppers, peas, beans, and other truck and canning crops received attention from 853 agents, who conducted 14,320 demonstrations with adults and 10,409 with juniors, and brought about changes in practices on 47,228 farms.

Home gardening.—Continued emphasis was placed on the production of vegetables for use by the farm family for the dual purpose of producing at home larger proportions of the food supplies needed by the family and of increasing the use of green vegetables in the diet. A total of 37,725 result demonstrations were conducted with adults, while 26,823 boys and girls successfully completed growing of specified garden vegetables. Gardening practices were improved by 89,156 farmers or home makers, and 24,548 were assisted in controlling diseases and insect pests affecting garden crops.

Beautifying home grounds.—Improvement of the home surroundings by means of planting trees and shrubs, the growing of flowers, and the better care of lawns continued to be an important phase of extension work. Changes in home surroundings were made by 47,416 homes during the year, as a result of 20,003 demonstrations being conducted by adults and 16,130 demonstrations by boys' and girls' club members.

Forestry.—Though the number of agents reporting forestry extension work is comparatively small, interest in forestry problems increased materially during the year. The planting of new wood lots and forests, thinning, cutting, planting of windbreaks, and treating to lengthen the life of fence posts and timber were emphasized. A total of 1,422 adult demonstrations were conducted, 1,878 forest and wood-lot plantings made, and 4,635 farmers influenced to adopt better forestry practices.

LIVESTOCK

Considering all livestock projects together, the number of demonstrations conducted in 1923, decreased as compared with 1922. This decrease took place in the work with swine, sheep, and beef cattle. The demonstrations

in dairying increased slightly, and those with poultry showed a large increase over 1922. The number of boys and girls carrying on livestock projects showed a slight decrease.

Dairying.—Some phase of dairy extension work was reported by 2,247 agents. A total of 315,569 farmers took up improved dairy practices during the year, 21,107 result demonstrations were conducted with adults, and 10,473 boys and girls demonstrated the advantages of improved methods in the care and management of dairy animals. An important means of meeting the purebred-sire problem emphasized during the year was the bull associations, 407 of which were reported organized with a membership of 6,997 farmers. Records of dairy production were kept on 29,329 farms, 16,552 of which were members of cow-testing associations. Extension agents assisted 65,459 farmers with dairy-feeding problems, and, in cooperation with Federal, State, and county veterinarians, influenced 197,399 farmers to test dairy animals for tuberculosis.

Beef cattle.—A total of 65,236 different farmers were influenced by extension work in 1923 to adopt better practices in beef production. Extension agents conducted 1,673 result demonstrations with adults and 4,453 boys and girls raised beef animals according to improved methods. Farms numbering 4,812 were assisted in obtaining purebred sires and 1,781 farms purebred females.

In cooperation with Federal, State, and county veterinarians, agents influenced 22,734 farmers to vaccinate for blackleg and 19,356 farmers to test beef animals for tuberculosis.

Sheep.—Farmers changing practices in sheep production during 1923 numbered 15,036, according to reports of 853 extension agents. A total of 1,628 result demonstrations were conducted, 1,524 boys and girls managed sheep for demonstration purposes, and 2,537 farmers were assisted in obtaining purebred rams.

Swine.—Better methods of swine breeding, feeding, and management were demonstrated by 28,313 boys and girls, and 7,431 result demonstrations were conducted with adults. Extension agents assisted 13,379 farmers in obtaining purebred boars, 15,027 in obtaining purebred gilts and sows, and 30,000 with swine-feeding problems. Better methods of controlling insect pests were followed by 30,910 farmers and 76,778 were influenced by the agents in cooperation with Federal, State, and local veterinarians to immunize their animals against cholera. In all, swine practices were changed on 146,869 farms during 1923.

Poultry.—Poultry raising is closely associated with the home as well as with the farm and is a branch of agriculture readily adapted to helping feed the farm family and supplementing the farm income with only a slightly increased capital outlay. More than 73 per cent of the county extension agents reporting, or 2,459, mentioned work with poultry. Demonstrations numbering 65,359 were conducted with adults, 50,048 boys and girls demonstrated improved methods of chick rearing and poultry management, and 133,911 farmers culled their flocks according to improved methods in order to increase efficiency in production. Agents assisted 70,867 farmers with feeding problems, and 70,276 in controlling insect pests. One or more poultry practices were modified on 309,719 farms.

RURAL ENGINEERING

Building construction, installation of lights, water, and sewage-disposal systems, land clearing, terracing, and drainage were the phases of rural engineering which received most emphasis in 1923. A total of 11,115 result demonstrations were conducted, 5,396 farmers were advised regarding drainage problems, 21,028 constructed terraces or soil dams to prevent erosion, and 33,449 followed recommended methods of land clearing. Agents assisted 2,322 farmers in installing sewage-disposal systems, 3,191 in putting in water systems, and 4,654 in installing lighting systems. Dwellings were constructed or remodeled according to plans furnished on 3,952 farms. With the assistance of extension agents, 24,497 farmers built or remodeled buildings other than dwellings.

RODENTS AND MISCELLANEOUS INSECTS

Rodents.—Work in the control of rodents and other animal pests continued to receive attention from the extension forces, especially in the Western States. In cooperation with the Biological Survey, 13,123 demonstrations were conducted and 85,352 farmers were influenced by extension work to follow the control methods outlined.

Miscellaneous insects.—Grasshoppers and other insects not peculiar to individual crops received attention in many sections of the country. A total of 15,045 result demonstrations were conducted and the cooperation of 88,024 farmers enlisted in practicing improved control measures.

AGRICULTURAL ECONOMICS

Farm management.—Agents assisted 16,164 farmers in keeping farm accounts. Complete or partial accounts of the business on their home farms were kept by 6,018 boys and girls. Recommended changes in organization of the farm business were made on 6,998 farms, advice concerning leases was given to 9,546 farmers, cost-of-production records were kept on 14,308 farms, assistance in making better use of labor was given on 42,537 farms, and 24,569 farmers were helped to obtain loans through farm-loan associations or from local banks. The farm-account school, where farmers are brought together in small groups to take inventories, to open and close farm accounts, and to discuss cost of production, farm organization, labor efficiency, and other farm-management problems increased in popularity during the year.

Marketing.—During the year the extension service rendered assistance in the organization of 1,853 new cooperative-marketing associations, and gave counsel to 4,409 other similar associations previously organized. Assistance with marketing problems was given to 939,298 farmers either through these associations or individually. The total value of purchases by these farmers was \$43,628,152, with a reported saving of \$4,314,134. The total value of sales reported was \$277,403,702, with a profit of \$21,158,941.

FOODS AND NUTRITION

The proper selection of food for the family diet, its preparation, child feeding and care, and the preservation of fruits, vegetables, and meats were all emphasized in 1923.

Food selection.—In 1923, 1,028 extension agents reported that 57,003 demonstrations were conducted, and that 285,933 different home makers improved their practices in food selection. A total of 120,899 home makers used more fruit in the diet, 148,536 used more green vegetables, 155,581 used more milk and other dairy products, and 55,540 increased the use of unrefined cereal products in the diet on the advice of the extension agents.

Food preparation.—Demonstrations numbering 15,980 in bread making and 14,727 in meal preparation were conducted with adults. Demonstrations outlined in bread making were completed by 24,206 girls and boys, and in meal preparation by 16,591 girls and boys. Improved methods in bread making were accepted in 83,502 homes and in meal preparation in 77,223 as the result of extension work during 1923.

Child feeding and care.—A total of 13,509 demonstrations were conducted in child feeding and care, resulting in 70,359 home makers adopting better methods of caring for and feeding 146,172 children. Assistance was given in 9,592 homes in correcting undernourishment in 20,527 children.

Food preservation.—Extension agents conducted with adults 62,476 demonstrations in preserving fruits, vegetables, or meats and fish, and 48,325 girls and boys completed junior demonstrations in food preservation. In all, 284,639 home makers adopted improved methods of canning, drying, brining, or otherwise preserving fruits, vegetables, meats, and other food products. As a result of extension work, adults and juniors canned 9,516,751 quarts, dried 1,319,215 pounds, brined and cured 5,359,218 quarts, and put up in other ways 3,023,877 quarts of food products.

CLOTHING

Selection.—The proper selection of clothing materials was taught in 8,683 demonstrations with adults and 10,967 demonstrations with juniors. As a result, the improved practices taught were adopted in 46,156 homes.

Construction.—In sewing and garment making, 67,294 junior demonstrations and 46,177 adult demonstrations were conducted, 207,889 different home makers made use of the information taught in these demonstrations, and 57,952 dress forms were made as aids to better construction.

Renovation.—Remodeling and renovating old garments and articles to make them better suited for present use were taught in 7,428 demonstrations with adults and 4,483 demonstrations with girls, and 32,002 home makers made practical use of this work during the year.

Millinery.—Hat making continued to have a strong appeal to rural women and girls both from a standpoint of economy and of satisfaction with the finished product. A total of 76,984 different home makers applied the methods taught in the 21,238 demonstrations conducted with adults and the 6,847 demonstrations completed by the girls enrolled in club work.

HEALTH AND SANITATION

In home health and sanitation, 16,075 demonstrations were conducted in 1923, and 674 county extension agents reported 112,463 home makers adopting better sanitary practices during the year. A total of 29,873 homes were screened to keep out flies and other insects, and 33,219 home makers received instruction in home nursing and first aid from the extension agents.

HOUSEHOLD MANAGEMENT AND HOME FURNISHINGS

Budgets, equipment, kitchen arrangement, work planning, and home furnishing and decorating were emphasized by the extension forces in 1923. Extension agents conducted with adults 27,541 demonstrations in all phases of household management and home furnishings, and 15,429 juniors completed the demonstrations in which they were enrolled. Following suggestions made by the agents, 7,990 home makers rearranged their kitchens, 21,258 installed new equipment, such as washing machines, fireless cookers, pressure cookers, kitchen cabinets, and iceless refrigerators, 5,061 put into practice the demonstrated methods of refinishing furniture, and 4,483 redecorated one or more rooms according to recommended methods. In all, 93,073 home makers adopted improved practices in household management and home furnishings as a result of extension work in 1923.

STATISTICAL SUMMARY

Table 12 on page 74 contains a complete statistical summary showing the activities and accomplishments by projects for each group of county extension workers assisted by the college specialists. The number of agents reporting on the various items is also given for purposes of comparison. In addition to the work listed, a large quantity of other related work was done with these same projects as well as along other lines having more or less local application.

EXTENSION WORK IN THE EASTERN STATES

Florence E. Ward, Regional Agent in Charge

STATES: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, New Jersey, Delaware, Maryland, and West Virginia.

Substantial progress was made during 1923 in increasing the effectiveness of extension work in the 12 Eastern States. Some contributing factors were:

(1) Greater and more widespread appreciation of the extension service on the part of rural people who are looking to extension workers in a definite way for technical information, leadership, and guidance.

(2) More effective use of local project leaders and committee members, thus developing to an unusual degree initiative, self-reliance, and power of accomplishment.

(3) Added responsibility and leadership of specialists in their respective fields, both as to subject matter and method.

(4) Improved methods of extension teaching, particularly increased use of the simplified demonstration, and definitely planned efforts to obtain adoption of recommended practices.

(5) Better programs of extension work obtained through:

(a) Closer cooperation of specialists and county extension workers.

(b) Further development of unified programs and the reinforcement of the work resulting from various groups dealing with the same problem.

(c) Wider use of data from farm accounts, farm-home studies, and surveys which have been developed by farm management specialists and county agricultural agents.

(d) County and State analyses of farm and home conditions, which have revealed resources and limitations and opened the way for constructive planning.

PERSONNEL

There were no marked changes in the organization and administration of extension work during 1923 in the 12 Eastern States, 10 of which maintained the same general supervising staff. In Maine and in Delaware the dean of the agricultural college was also director of extension work. In New York and

in Pennsylvania the educational effort of the college and experiment station was directed through vice deans, who served also as directors respectively of extension teaching, resident teaching, and research. In New Hampshire experiment-station and extension work are combined under one director.

The support of extension work, despite the depression in agriculture and the general movement for retrenchment in expenditure of public funds, was most satisfactory. Some States even reported that increases in the amount of public funds for extension work were made available. During 1923 only one resignation occurred among supervisory officers in the Eastern States. The change was in the leadership of home-economics extension work in Pennsylvania.

The number of agents employed in county agricultural work, increased from 259 in 1922 to 260 in 1923, in home demonstration work from 122 in 1922 to 139 in 1923, but in county club work the number decreased from 79 in 1922 to 67 in 1923. The actual gain in the number of home demonstration agents is only 3, as 14 of the workers in Pennsylvania were classified differently during 1922. Table 1 gives the number of specialists in the various subject-matter projects.

TABLE 1.—*Number of specialists employed in the Eastern States, 1923*

Project	Number of States	Full time	Part time	Total
Animal husbandry.....	5	13	2	15
Dairying.....	10	17	4	21
Poultry.....	9	19	2	21
Entomology.....	4	7	4	11
Agronomy.....	9	15	3	18
Plant diseases.....	5	8	4	12
Forestry.....	3	2	1	3
Rural engineering.....	2	3	2	5
Rural organization.....	3	8	1	9
Farm management and economics.....	9	14	2	16
Home economics ¹	3	18	4	22
Horticulture.....	8	18	5	23
Home management.....	2	1	1	2
Clothing.....	5	7	—	7
Marketing.....	3	2	2	4
Publicity.....	1	—	1	1
General educational extension.....	1	—	5	5
Foods and nutrition.....	5	8	1	9
House furnishing.....	1	1	—	1
Home nursing and health.....	1	1	—	1
Total.....	—	162	44	206

¹ In some States such projects as home economics, nutrition, clothing, and home management were grouped under the general heading "Home economics," and in others they were classified as subprojects.

REGIONAL PROBLEMS

Although 1923 was a year of decided success in the Eastern States, it brought problems of district and regional importance calling for the serious consideration of extension workers. Among these may be mentioned:

(1) The high cost of maintaining extension agents made budget making difficult. Funds that were sufficient a few years ago no longer met the cost of the same work. Even at salaries prevailing in 1923 it was difficult to obtain trained and experienced workers.

(2) Effective supervision of county extension agents was a difficult problem. In view of the frequent changes among agents, the limited training of many, and the great diversity of tasks and responsibilities which they must assume, more direction and training should be given. Supervisors are, however, in many cases prevented from giving this guidance because of time spent in replacing agents and obtaining local funds.

(3) The extension program of this region in both agriculture and home economics presented certain complexities due to varied types of farming and of farm people, the farms varying from the general dairy farm to the highly specialized truck farm. New England has three types of products: (a) Fresh fruits, vegetables, and potatoes, typified by horticultural activities; (b) poultry, primarily to satisfy the demand of the people of this section for strictly fresh eggs; and (c) forage crops raised primarily for the use of dairy cattle to produce market milk, and forage for horses to cultivate the crops. Moreover, the extension worker in this region deals with many types of farming people, strikingly different as to racial, social, and economic background, traditional habits and customs, and living standards. The rural population of the region comprises, in addition to the types that go to make up the normal rural community, the industrial-rural and the suburban population, the village group, and the summer colony, with the foreign element much in evidence in certain sections.

PROGRAM SUMMARIES

Agricultural conditions and farm problems are by no means uniform in the Eastern States. The Northeastern States have conditions different from those in New York and Pennsylvania. Maryland, Delaware, and West Virginia in turn present problems peculiar to themselves, and the farming areas near large cities also have distinctive problems. Nevertheless, a study of the program summaries furnished by county agents in their annual reports is significant, showing how well extension effort is organized, which groups of problems receive the most time and attention, and which activities are regional in character. Table 2 is a partial summary of the data furnished by county agents in their annual reports for 1923:

TABLE 2.—*Program summary, 12 Eastern States, 1923*

Project	Number of communities participating ¹	Adult result demonstrations completed or carried through the year		Days' help from specialists		Days agents worked	
		Number	Percentage of total	Number	Percentage of total	Number	Percentage of total
Soils.....	686	1,891	3.53	181	1.10	1,299	1.22
Farm crops.....	3,473	10,078	18.79	2,090	12.70	13,293	12.47
Horticulture.....	1,884	2,811	5.24	1,630	9.90	7,738	7.26
Forestry.....	563	683	1.27	285	1.73	596	0.56
Animal husbandry.....	1,696	399	0.74	1,015	6.17	5,540	5.20
Dairy husbandry.....	2,520	1,111	2.07	1,347	8.18	8,754	8.21
Poultry husbandry.....	3,266	2,291	4.27	2,221	13.49	8,208	7.70
Rural engineering.....	165	421	0.79	154	0.94	287	0.27
Rodents, insect and animal pests.....	16	242	0.45	4	0.02	24	0.02
Agricultural economics.....	1,728			740	4.49	3,435	3.22
Foods and nutrition.....	1,652	9,917	18.49	947	5.75	6,417	6.02
Clothing and millinery.....	2,674	16,366	30.51	1,509	9.17	10,551	9.89
Home health and sanitation.....	362	905	1.69	317	1.92	489	0.46
Household management and home furnishings.....	1,104	2,552	4.76	406	2.47	2,395	2.25
Community activities.....	1,033			447	2.72	2,367	2.21
Miscellaneous.....	5,169	3,967	7.40	3,169	19.25	35,229	33.04
Total.....		53,634	100.00	16,462	100.00	106,622	100.00

¹ Number of communities in region recognized for extension work, 11,567

Although it is not possible to judge of any piece of educational work from statistical data, and this is especially true of extension work, it may be assumed that the number of communities reached and of practices actually adopted is a fair measure of progress. Of the total number of communities in this region, 11,567 are recognized for extension work, as shown by 453 reports. Of these communities 8,191, or more than 70 per cent, have extension programs that have been worked out cooperatively by extension agents and local people. Agents reported that 23,865 local leaders took part in adult work and 5,128 in junior work. These leaders gave 71,876 days to the work, which is equivalent to the time of approximately .240 full-time volunteer workers.

A total of 3,473 communities, or approximately 30 per cent of the communities having organized extension work, took part in the farm-crops project, and extension workers gave 15,383 days to this project and conducted 10,078 adult demonstrations. Although extension workers gave practically the same number of days to poultry and dairy work, 10,429 and 10,101, respectively, more than twice as many adult demonstrations were conducted in poultry work, 2,291, as compared with 1,111 in dairying, with 3,266 communities participating in poultry work and 2,520 in dairying. This is probably because the demonstration unit in poultry work is simplified and small and in dairying complex and large.

Similar studies of this table bring out points of contrast between other projects with special reference to the interest shown in the project and the relative simplicity of the demonstration and practices involved.

FARM ACTIVITIES

SOIL IMPROVEMENT

Although work in soil improvement did not engage so large a part of the time of extension agents as some other projects, it seems to have been one of the major activities that influenced a large number of farmers. Improving practices in the use of fertilizers, particularly teaching the use of high-analysis fertilizers, received considerable attention. In general, however, extension agents directed greater effort toward teaching the value of lime. This bears upon the need for obtaining more leguminous roughage, a problem that was given attention by almost all agronomy specialists throughout the region. A gauge of the type of work carried on in soil improvement, together with an accounting of the results, may be obtained from Table 3 summarized from the reports of county agents in the 12 Eastern States. The number of agents reporting on each item when compared with the total number of agents in this region—261—who furnished annual reports, serves as an index of the importance of each activity to the region.

TABLE 3.—*Results of extension activities with soils in the Eastern States, 1923*

Kind of work	Number	Agents reporting
Result demonstrations completed or carried through year	1,891	165
Acres involved in these completed demonstrations	18,247	156
Farms influenced by extension work to change practices relative to soil management.	35,702	242
Acres involved on such farms	450,197	223
Farms following advice in use of commercial fertilizer	16,059	211
Farms home-mixing fertilizers according to advice	5,064	166
Farms taking better care of farm manures	4,260	132
Farms using lime or limestone according to advice	17,697	223
Tons of lime or limestone so used	125,251	211
Farms plowing under cover or other green-manure crops for soil improvement according to advice	5,610	164
Acres of cover and green-manure crops plowed under	52,142	153

The figures cited above show that nearly half of the farmers influenced to change practices relative to soil management were interested in using lime. Pennsylvania used 38,724 tons, or the largest number reported in the Eastern States.

The introduction of legumes, which seems to be a major problem with many extension specialists and county agents in the six New England States, is, of course, closely connected with the use of lime, its availability and cost. Only 6.4 per cent of the quantity of lime reported as used by farmers in the Eastern States was used in New England. The high cost of lime and freight charges coupled with other conditions make the problem of growing legumes in New England an especially difficult one.

FIELD CROPS

Alfalfa, clover, other legumes, and forage crops.—In view of the great importance of dairying to the Eastern States, the problem of obtaining a larger supply of home-grown leguminous roughage received increased attention during 1923. Because of the difficulties attendant upon growing clover, alfalfa, or other legumes, particularly in New England, the farmer has come to depend a great deal upon feeding concentrates. According to figures from the 1920 census, the amount expended for feed by farmers in the New England States, averaging \$445 per farm, was equal to 45 per cent of the total value of all livestock, excluding poultry. Farmers in this section reported an average livestock valuation of slightly more than \$970 per farm. The small amount of tillable land, difficulty of preparing land for legumes, high cost of lime, and increasing dependence upon high-priced concentrates have tended to lessen the growing of leguminous hay and feed in this section, particularly in New England. However, in 1923 several States made more intensive drives to obtain the interest of farmers in these problems.

Alfalfa and clover seem to have been the crops most recommended by extension agents in the Eastern States. However, in some States other legumes

were also introduced, especially soybeans and sweetclover. Work with soybeans, however, made little headway in the northern part of this section. The high price of seed, use of varieties not adapted to the section, and difficulty in curing the hay deterred many farmers from planting the crop. In the case of alfalfa and red clover much disappointment was felt because seed used came from foreign sources and was not hardy in this region. Extension specialists, therefore, concentrated on showing the value of sowing only northern-grown seed from known sources. Altogether, no problem deserves greater study than that of reducing the high cost of dairy production in the East. The underlying causes and the prevailing practices of the farmers need to be better known and understood and practical and economical solutions worked out. The home production of leguminous hay may be one way out, but it remains a problem to make this practicable for most farms in New England under present conditions.

As a whole, the results reported are encouraging, showing that 6,699 farmers adopted improved practices in growing 27,926 acres of alfalfa in the Eastern States. New York reported the largest number of farms adopting improved practices in growing alfalfa while Maryland reported the largest acreage of alfalfa planted. Of the county agricultural agents employed in this region 75 per cent reported some work on alfalfa. Reports from 106 agents showed that 28,065 acres of soybeans were planted. Most of the work of introducing soybeans was reported by agents in Delaware, Maryland, and West Virginia. These States also recorded a great interest in lespedeza, which, though comparatively a new pasture crop, seems suited to some of the southernmost States of this region.

Potatoes.—The effort to improve practices in growing potatoes was one of the outstanding features in 1923, and the emphasis placed upon influencing farmers to plant improved, northern-grown, certified seed potatoes produced unusual results. The yields from such seed are so much greater than when ordinary seed is used that farmers are usually quick to adopt this profitable practice.

As a result of the work in introducing certified potato seed in Connecticut, 69 carloads of such seed were used during 1923. A gain of 76 bushels per acre over uncertified seed was reported. The estimated total net gain was nearly \$320,000 for the year. In Maine the average yield of 279 demonstrations was 329.8 bushels, an increase of 83.4 bushels over that obtained from plots planted with uncertified seed for comparison. This represents a total gain of nearly \$47,000 for the demonstration plots alone. Statements and reports from 700 cooperators in this work, who also planted improved seed last year in Maine, indicate similar rates of gain. The results for 1923 reported by extension agents in the Eastern States are shown in Table 4.

TABLE 4.—Results of extension activities with potatoes in the Eastern States, 1923

Kind of work	Number	Agents reporting
Adult result demonstrations completed or carried through year.....	2,405	181
Farms influenced to adopt better practices.....	35,714	262
Farms planting improved or certified seed.....	20,626	226
Farms treating seed for disease.....	8,308	183
Farms spraying or dusting for insects or diseases.....	17,065	211

Junior extension work in potato improvement reenforced and strengthened the project as a whole. Some States reported that very good results were obtained by potato-club members. Pennsylvania reported an enrollment of 2,103 boys and girls in potato clubs. The major accomplishment was in a demonstration of the value of good seed carried on by boys and girls in 26 counties, which was featured by meetings, round-ups, and potato-club shows. Improved seed yielded an average of 232 bushels per acre as against the average of 175 bushels for ordinary seed, according to reports received from 449 club members. One club member also met the requirements of a State 400-bushel potato club, and thereby won a place of honor in the State with 50 adults.

FORESTRY

County agents in 9 of the 12 States of this region reported some work in forestry. Considerable progress was made in meeting the problems of reforestation, wood-lot planting and management, and control of white-pine blister rust. Much of the work reported, particularly in reforestation, was made possible through the active assistance and cooperation of State foresters and conservation commissioners.



FIG. 11.—Melon blight reduced the crop of this field by two-thirds. Spraying according to the advice of extension agents and specialists has in many cases prevented very serious decreases in yield due to disease. (Photograph furnished by New Jersey Extension Service)

In fruit growing, efforts of extension agents have revolved around the problems of producing fruit of better quality and of teaching farmers and fruit growers to prepare fruit for market to the best advantage. Thus the work is marked in most States by demonstrations and other instructions in pruning, thinning, effective spraying against diseases and insects, soil management, including the use of cover crops and fertilizers, standardization of varieties, and grading and packing fruit for market. Special effort was directed in many of the Eastern States to developing better home orchards and to increasing their number. This was done because of the opportunities that much of this section presents in fruit growing, and also because of the need for increasing the attractiveness of farm life. There seems to be a rapidly diminishing supply of good fruit about country homes. Home demonstration workers are developing an ever-increasing interest in the use of more fruits and vegetables in the diet. The difficulties attendant heretofore upon the control of insects and diseases in the small home orchard have brought about indifference to producing more fruit and fruit of higher quality. However, the development of commercial spray service and spray groups and rings is helping to solve this problem, and renewed interest in the home production of fruit is one of the outstanding developments in the field of horticultural extension.

Specialists in horticulture and boys' and girls' club leaders should be commended for their efforts to reinforce the work carried on by adults with junior club work. Vegetable gardening and the growing of small fruits lend themselves to club work. Club projects in work with small fruits were com-

HORTICULTURE

Extension work in horticulture occupies a prominent place in this region. Fruit growing is an important industry in many of the States, and is being rapidly extended in others. The development of roadside market stands which make it possible for many farmers to sell fruit and other farm products profitably has stimulated interest in the industry and given impetus to extension activities in teaching fruit growers to produce fruit of higher quality. The market-gardening industry is also well developed in several States, such as New York, Pennsylvania, Connecticut, and New Jersey, where specialists in market gardening are employed to help advance extension programs.



FIG. 12.—Control of melon blight was effected on this field through five sprayings, which brought the field through to a successful five-week picking season. In the Eastern States in 1923, 13,040 farmers sprayed or dusted tree fruits for diseases; 303, bush and small fruits; 2,039, grapes; 2,177, vegetables; and 2,355, tobacco, according to the advice of county extension agents and specialists. (Photograph furnished by New Jersey Extension Service)

pleted by 101 boys and girls, 233 boys and girls completed work in market gardening and grew crops valued at \$22,516, and 4,973 boys and girls finished work in vegetable gardening and grew crops worth \$85,168. This is significant in view of the emphasis placed on teaching the importance of more rational food habits.

Another practice which won widespread interest and in many cases showed unusually good results, was the demonstration work in applying fertilizers, especially nitrate fertilizers, to orchards. The specialist in pomology in Connecticut reported that a demonstrator received an average per year for the last two years of \$273.75 per acre from the fertilized plot and \$76.85 from the unfertilized plot in his orchard of 25-year-old trees. The fertilized plot received 8 pounds of nitrate of soda per tree in 1921, 5 pounds in 1922, and 5 pounds of nitrate and 8 pounds of acid phosphate in 1923.

Vegetable gardening.—Much of the effort in vegetable-gardening extension work centered around trials of seed of the principal vegetables in order to show the value of seed of certain strains and from certain sources, as well as to show the value of varieties, fertilizer trials, labor-saving devices, and control of insects and diseases. Somewhat related to this same type of work was the effort made in several States to have tomato plants grown under the supervision of the extension agent or by the firm contracting for the tomatoes. As a result of the accomplishment shown in New Jersey in using selected transplanted tomato plants, one large firm spent \$50,000 in building equipment for the purpose of growing plants for growers. A record of comparative results of tomato-plant demonstrations furnished by the specialist in vegetable gardening in New Jersey is shown in Table 5.

TABLE 5.—Comparative results of tomato-plant demonstrations, New Jersey, 1923

Cooperator	Production from—	
	Transplanted plants	Field-grown plants
	Tons per acre	Tons per acre
A.....	10.3	6.3
B.....	8.2	4.6
C.....	12.5	9.1

PLANT PATHOLOGY

Commercial production of fruit and vegetables, as well as some special crops like tobacco, is so important and so specialized in certain of the States of this section that the problem of disease control is a serious one. Shippers, dealers, and agents of transportation companies are interested with farmers in controlling diseases which cause losses after a crop has left the farm. Therefore, more extension pathologists are at work in this region than in any other and the program is a varied one, generally divided into diseases of fruit crops, of vegetable crops, of cereals, and of special crops such as tobacco, although in some States it may include everything from grain-smut control to fighting tobacco wildfire.

In sections of specialized crop production, the control of plant diseases frequently means the difference between a good crop and a failure (figs. 11 and 12). In some counties the problems are so specialized that growers are willing to cooperate with the college in employing a special county assistant to help them control plant diseases and insects. New York has developed this work to the greatest extent, 11 county assistants being employed in 12 counties in 1923. These special field assistants are employed for six months each year. Where fruit growing is an important industry in a county, the principal work of the field assistant is to conduct a spray information service, which gives the growers full, timely, and accurate information as to the proper applications to use for the control of insects and plant diseases, and shows them the value of spraying schedules. In some counties conditions are such that the field assistant divides his time between work with fruit growers and with potato growers.

Extension work in the control of potato diseases largely revolves about the procuring and use of seed potatoes which are comparatively disease-free, the treatment of seed potatoes, and the spraying of plants. Table 6, giving the results of using certified potato seed in New York, is unusual, because the records go back over a long period. These records offer splendid testimony to the value of this type of extension effort. The leader of the plant-pathology work in New York reported that never before since records have been kept of the yield per acre of potatoes have there been five consecutive years when the yield per acre each year has exceeded 100 bushels. The natural inference is that this must be the result of the more general use of better seed. The extension service has placed much emphasis upon this and has also given considerable time to making good seed available.

TABLE 6.—*Results of using certified potato seed in New York, 1916-1923*

	1916	1917	1918	1919	1920	1921	1922	1923
Average yield per acre of certified fields.....	<i>Bushels</i> 128	<i>Bushels</i> 233	<i>Bushels</i> 204	<i>Bushels</i> 221	<i>Bushels</i> 247	<i>Bushels</i> 228	<i>Bushels</i> 225	<i>Bushels</i> 209
Average yield per acre for State.....	70	95	98	109	125	103	110	122

The plant-pathology report from Pennsylvania states:

It is not a difficult task to reach a grower of potatoes on a large scale with a spray program, but the small grower presents a problem. This is being solved, however, in what seems to be a satisfactory way by the spray ring or cooperative spraying. In the past season 220 spray rings, reaching 1,971 growers, were in operation. More than 23,000 acres of potatoes in every county of the State except four were sprayed as recommended by the extension service.

The small-orchard owner presents the same problem. This is met in Pennsylvania and the other States by the development of spray rings and more particularly through commercial spray groups. Success and accomplishment comparable to what was recorded in work with potatoes was also reported in the control of tobacco wildfire, onion smut, celery blight, melon blight, cabbage diseases, cereal smuts, cucumber diseases, root-rot of peas, and many other plant diseases.

DAIRYING

Dairying is the most important farm industry in most of the Eastern States and is given more attention from extension agents than any other project except agronomy. Moreover, it has been pointed out that a very large part of the effort in agronomy extension revolves around the production of forage crops and is therefore directly related to dairying. Table 7 presents an interesting summary of the principal extension activities in dairying:

TABLE 7.—*Results of extension activities in dairying in the Eastern States, 1923*

Kind of work	Number	Agents reporting
Adult demonstrations completed or carried through the year.....	1, 111	58
Animals involved.....	16, 505	58
Farms influenced to adopt better practices.....	67, 977	277
Animals involved.....	683, 459	265
Purebred sires obtained.....	1, 263	178
Purebred females obtained.....	3, 550	151
Members in cow-testing associations.....	2, 900	104
Farmers not in association testing cows.....	1, 694	118
Cows under test by such associations and individual farms.....	46, 279	134
Farmers feeding better rations.....	15, 130	183
Farmers having animals tested for tuberculosis.....	52, 335	196
Animals tested for tuberculosis.....	607, 477	182

Judging by the number of agents reporting and the number of animals involved, the work of eradicating tuberculosis in the Eastern States under the supervision of the Federal Bureau of Animal Industry and State authorities

seems to have received the greatest amount of attention. Over 50,000 farms and over 600,000 dairy cattle were involved during 1923. This shows a tremendous public interest in a problem vital to both city and farming people.

Measured in terms of the number of animals involved, the work in testing cows for production ranks next in importance. Reports from county extension agents show that records of production of 46,279 cows were obtained in 1923. This work has considerable bearing on the effort to obtain more profitable dairy production. Especially significant is the fact that extension agents are trying to find a way to reach more farms by devising other agencies than the cow-testing association, which does not seem to lend itself to regions where dairy herds are small. Closely related to this type of effort is the work carried on to introduce purebred sires, interest in which is growing through the influence of extension work. The large number of purebred females introduced is a tribute to the work of boys and girls who made this a major project in many counties. The better methods of feeding being introduced are of special value because, as has been pointed out, the annual outlay for feeds is most important.

As a whole the accomplishments recorded in dairy improvement in 1923 were encouraging. The eastern farmer, and that means the dairy farmer for much of the territory, was discouraged because of high costs and declining prices. He therefore appreciated the effort of extension agents in the various extension activities in dairying.

POULTRY

Interest in the promotion of poultry husbandry and in more profitable poultry production on farms in this section was maintained at a high level. It is true that competition of western producers and the increase of production are causing some commercial poultrymen to wonder about the future; yet it would seem with the great markets maintained in this region that an intensification and improvement of methods in farm production of eggs and poultry will continue to have a big place and continue to bring adequate rewards to farm flock owners.

The intensive development of the poultry industry near the large centers brings problems of a more technical nature than those presented by the farm flock owners. Extension work with the small-flock owner revolves around selection, better housing, feeding and management, brooding and rearing chicks, and grading and marketing eggs and poultry, and lends itself admirably to teaching in terms of single practices. Work with the larger flock owners necessarily brings in commercial aspects. With both classes of poultrymen, the progress that was made in the development of more profitable poultry production was most encouraging.

Culling demonstrations still seem to be the most popular, although not the most important feature of the work, because they are often the means of developing real interest in profitable production among people who have had indifferent success with poultry. Poultry club work and farm egg-laying contests, which have been developed perhaps to a greater extent in New Jersey and Connecticut than elsewhere, are important features of extension activities. Records indicate that the average production per bird has been raised considerably within a rather brief period.

The specialist in poultry in Pennsylvania reported that, in 1919, 50 complete records from demonstration farms showed an average production per bird of 120.2 eggs. During 1923, records from 138 farms, with 32,095 hens, showed an average production of 142.7 eggs. The average in Connecticut over a 4-year period has been increased from 131.4 to 143.1 eggs per bird as a result of similar work. In Connecticut, the effort to obtain more eggs early in the season likewise has been successful, the records of the home egg-laying contests showing that the average number of eggs per bird laid during November was 3.70 in 1919 and 5.49 in 1923, with 35,077 hens and 100,844 hens involved, respectively.

Demonstrations emphasizing the value of sanitation and methods of controlling poultry diseases were carried on. Boys' and girls' club work in poultry is another example of what can be done in drawing junior and adult extension work more closely together. In the Eastern States, 3,750 boys and 1,543 girls completed poultry club work in 1923, raised poultry valued at \$168,824, and obtained poultry products valued at \$197,095.

FARM MANAGEMENT

Since agriculture in many of the Eastern States, particularly in New England, is passing through an adjustment period, extension work in farm management and agricultural economics was received with keen interest. The work in farm accounting, including cost accounting, farm business analyses based on accounts, and farm-management surveys, seems to have been appreciated by farmers. Such studies, as well as special surveys and analyses carried on by farm-management specialists, had important bearing also on guiding the selection of local programs of extension work. The need and value of such studies is coming to be understood by specialists and county extension agents as never before.

The States of Maine and Vermont made intensive farm-to-farm surveys to obtain data helpful in outlining programs and plans of extension work best fitted for community needs. In Maine such studies involved surveys showing (1) what farmers were doing, (2) to what local conditions were best adapted, (3) to what the markets were best adapted, (4) what the transportation facilities were, and (5) what cultural methods were involved. The farm management demonstrator in New Hampshire outlined the situation that many farmers must meet, in the following, which has its application to much of the eastern section.

When labor was cheap a farmer could probably use intensive methods on a small area, but under a competitive system as to wages and prices of products, he must in some way raise production per man. This usually requires a reorganization of the business, either by a change to a more intensive type of business, such as specialized poultry farming, or by an increase in the size of the organization. Greater production per man has been solved, temporarily at least, on many farms in southern New Hampshire by turning to poultry. But on the great majority of farms greater production per man must come through the enlargement of the general or dairy farm. This program is beset with many real difficulties, some of which follow:

(1) The very nature of the rough topography and rocky soil makes it impossible in some sections to obtain a large acreage of good tillage land.

(2) Wherever there is a large area of tillage land in one location, there are usually several farmsteads. A farmer can not buy additional tillable land without buying expensive buildings that are not needed.

(3) Even where the farmer has a large unit of good land, his operations are narrowed by the problem of fertility. The average New Hampshire farmer builds his cropping system around the manure pile. He is unwilling to plow up more than he has dressing to cover liberally.

(4) The farmer with a small business often lacks the necessary money for expansion. The profits from his small business are too meager to permit the accumulation of capital.

(5) The average New Hampshire farmer is inexperienced in production in a big way, and does not realize that better methods would enable him to handle a larger area easily.

Thus, though the successful solution of this problem of greater production per man through better organization holds the hope of New Hampshire's agriculture, it is not easily attained.

HOME ACTIVITIES

FOODS AND NUTRITION

The project of foods and nutrition is one so fundamental to successful farming and farm life as to justify its present place as a major enterprise in home-economics extension work in the 12 Eastern States.

Some conditions which have influenced the choice of activities and determined the character of the work are (1) lack of knowledge of the relation of diet to health, (2) limited recognition of the variation which should be found in the diet of adults who are more or less active and children of different ages, (3) limited interest in and understanding of American foods on the part of the foreign population, (4) the tendency, where foods are produced for profit, to retain insufficient quantities and varieties for home consumption, (5) inadequate supply of milk and milk products for growing children, and (6) meager quantities of fruits and vegetables in the diet, particularly during the winter season.

In an endeavor to improve these conditions and thus help to keep the farm family fit, the greatest emphasis of the year, especially in Connecticut, Maine, Maryland, New Hampshire, New Jersey, Rhode Island, and Vermont, was placed upon food selection and preparation, and with these the food budget and the available food supply, taking into account the vegetable garden, preservation and storage of fruits, vegetables, and meats, milk supply, and care of milk. There has been a marked increase in the number of recorded result demonstrations in these subprojects.

Local leadership, active in all these enterprises, has helped materially in arousing communities to action in relation to the improvement of food habits.

Such local leadership is outstanding in New York. The total number of homes in the Eastern States influenced by the extension service to serve better-selected foods was 22,059, as reported by 121 agents. Demonstrations in food selection were held in 4,923 homes, the work covering 88 counties.

In meal preparation, 2,680 adult and junior demonstrations were completed. Club members prepared 39,531 meals during 1923, according to reports. In child care and feeding, 5,302 children were involved in 657 completed demonstrations, covering 36 counties. Reports show that 4,920 farm women were influenced by the extension service to change practices in child feeding and care. A total of 1,474 home makers reported the correcting of undernourished children. In food preservation, extension agents reported that 192,293 quarts of fruits and 154,056 quarts of vegetables were canned by adults, with a relatively large amount of fruits dried and some meat brined and cured. Members of boys' and girls' clubs canned 55,310 quarts of fruits and 57,168 quarts of vegetables.

More fruit was reported as being used in the diet by 7,908 home makers in 98 counties. In 99 counties, 8,520 home makers reported using more green vegetables in the diet, and 95 counties reported that 7,735 home makers used more dairy products. More unrefined cereal products were used in 5,675 homes, according to 76 reports. Thirty-three counties reported 1,794 demonstrations completed in preserving fruits, 18 counties reported 723 demonstrations in preserving vegetables, 9 counties reported 165 demonstrations in preserving meats and fish, 65 counties reported that 3,893 home makers practiced better methods of canning vegetables, and 28 counties reported 715 homes in which better methods of preserving meats were used.

It is probable that no project had a more carefully worked-out program than the nutrition project. Important features of this program were introduced as a result of plans made at a conference of nutrition workers at Ithaca, N. Y., in the fall of 1921, at which representatives of all but two of the Eastern States were present. This conference focused attention upon the outstanding problems in food habits of the farming people of this region, conditions which brought them about, and how the extension service could assist in their solution.

Possibilities of a long-time nutrition program, importance of the simplified demonstration, means of training local leadership, and available food supply in relation to food selection were discussed and plans of work developed, which have since been put into successful operation. Some of these sub-projects are "feeding the preschool child," "milk for health," "corrective feeding," "meal planning," and "work with young mothers."

One striking example of results of the coming together of this group is the correlation of the work of the nutrition specialist, the fruit specialist, the vegetable-gardening specialist, and the dairy specialist on the problem of available food supply. The nutrition specialist has determined the food budget necessary for a family of given size and the supply of food needed to be canned or stored in order to provide a balanced diet the year round. The gardening specialist, the fruit specialist, and other agricultural workers have given assistance in determining the amount of space, seed or plants, and fertilizer needed, and the methods of care for the crop. The nutrition and dairy specialists have cooperated in work on the increased use and better quality of milk.

In this connection it should be pointed out that milk campaigns initiated by the Dairy Division (now the Bureau of Dairying) of the United States Department of Agriculture in cooperation with the extension service and conducted by extension workers, have been carried on for some time with marked success in nearly all the Eastern States and have resulted in increased use of milk.

Many members of boys' and girls' clubs have a better conception of the relation of diet to health and economy because of their part in the nutrition program. In a number of the States a food score card was used, by means of which undesirable food habits were pointed out and corrected, the work leading to the growing of leafy vegetables, to the making available of a sufficient milk supply, to the use of unrefined cereals, and to an interest in the preparation of these foods. This work also caught the attention of boys through camp cooking and preparation of hot school dishes. Club contests also figured in the work.

An important development was the work of standard food clubs for girls, which conducted definite demonstrations leading through logical steps from the simple to the more difficult activities covering a period of years, thus equipping club members for future planning and preparation of well-balanced meals, and for canning, drying, and storing food for a varied and wholesome diet. Food-production activities, such as gardening, poultry raising, and beekeeping, were carried on by club members, often for the dual purpose of financial return and training for future home making.

Although the discussions of this report refer primarily to farming people, it should be mentioned that in connection with the nutrition project, as well as with every other home-economics project here reported, excellent work was carried on by the four city home-demonstration agents and their assistants, practically every phase of nutrition work having been brought into the programs of these city workers. Results of their work are included in the statistics

given in connection with the home-economics projects. This city work is an integral part of the extension service in the States where it is carried on.



FIG. 13.—Home demonstration agent demonstrating the use and proper care of the sewing machine and its attachments. In 1923, considerable assistance was given by extension agents to farm women and girls in the 12 Eastern States in clothing work. Agents reported that approximately 19,800 adult and junior demonstrations were conducted with clothing construction, 1,250 with clothing selection, 860 with clothing renovation, 5,530 with millinery work, and 255 with other clothing work, including remodeling and care of garments. (Photograph furnished by New York Extension Service)

CLOTHING

Broadly speaking, farm women called for and received guidance on their clothing problems along the following lines: (1) Selection of fabrics, (2) selection of ready-made garments, taking into account economy, suitability, healthfulness, and becomingness as to line, color, and texture, (3) garment making, including construction principles, short cuts, time-saving methods, arrangement and use of the larger equipment, such as the sewing machine and its attachments, efficient sewing kit, the dress form, and the pressing board, (4) care and repair of garments, (5) remodeling of partly worn clothing, (6) hat selection and construction, and (7) the clothing budget. (Fig. 13.)

The resources of the family pocket-book, accessibility of shopping center, size of family, age of children, and other

factors determined where emphasis should be placed. With funds available and shops within easy reach, selection of garments and balance of expenditures were considered. Where money was scarce, the problem called for the selecting of material to be made up in the home, or for ingenuity and skill in renovating and remodeling, with economy of time, strength, money, and material considered.

Considerable practical help was given to mothers of young children in the making of simple durable clothing that is easily and quickly made or remodeled and that wears and washes well. Assistance given to foreign women was not only valuable in itself, but paved the way for guidance in matters of foods, sanitation, and child care. Clothing selection for young women and adolescent girls was a means of combating tendencies toward needless expenditure and extreme styles in dress. The clothing work of girls' clubs enlisted their largest enrollment, the activities including the complete uniform or summer costume, the winter costume, and the clothing budget of the well-dressed girl. Club members constructed or remodeled 39,060 garments.

Work with millinery, which in itself proved a means of economy and satisfaction to many farm women and girls, also served as a means of interesting them in other and more important home projects. Every phase of the clothing problem was given some attention in the various States, but the bulk of the work was on constructing and remodeling garments and making hats. According to figures from 174 reports, 10,015 result demonstrations were completed and 34,712 home makers influenced to adopt better practices in garment construction and remodeling through adult or junior activities; 41,365 garments were made; 9,831 club members completed work in clothing construc-

tion; and 327 in millinery. As a result of the work 20,179 hats were reported made.

Such accomplishments are gratifying when considered in their relation to the number of specialists and home demonstration agents engaged in promoting the work. They represent, however, but a small beginning of the work that is needed if the best results are to be obtained in the selection and care of clothing and if the vast amount of clothing construction now carried on is to be handled with the least waste of time and material and with results that are satisfying from the standpoint of attractiveness, comfort, and health.

A farm survey⁶ made by the Office of Cooperative Extension Work in 1919 brought out the fact that, for the Eastern States, 60 per cent of the women reporting made part of their outer garments, 48 per cent part of their children's clothing, 27 per cent all their children's clothing, and 24 per cent some clothing for men on the farm. Adding to this the responsibility of purchase and upkeep of clothing for the family often with a small amount of money to spend and limited facilities for buying, it is easy to understand why the clothing project is in demand.

HOME HEALTH AND SANITATION

One objective in this educational enterprise is to arouse a consciousness of what positive health means to the farm family in matters pertaining to nutrition, clothing, sanitation, and an all-round wholesome environment.

Health habits and practices in the home and many phases of sanitation were emphasized, and advice was given to mothers of young children regarding their physical care at various stages of development, including diet for growth and rules for posture, exercise, and rest. The health requirements of adult diet were strongly urged, as well as rules for posture, exercise, and recreation. First aid and care of the sick were also demonstrated.

A comparatively small amount of work in home health and sanitation was reported as such, most of the activities being included under nutrition, home management, and clothing activities. In 15 counties, 905 home-health and sanitation demonstrations were completed or carried through the year, 51 counties demonstrated better sanitary practices, with the result that 6,193 home makers were reported influenced by the extension service to adopt these practices; 37 counties reported instruction in home nursing and first aid given in 3,490 homes; 237 home makers provided home medicine chests; 205 sanitary closets or outhouses were installed; 1,128 homes were screened; and 736 home makers followed other means of controlling flies, mosquitoes, and other insects. One phase of the work in Connecticut was health clubs.

Work along health lines of concern to the entire family had the support of county agents, club agents, and agricultural specialists as well as home demonstration agents, particularly in improving water supply and sewage disposal and other means of eliminating sources of disease, including the testing of cattle for the eradication of tuberculosis. Extension agents reported that 294 sewage-disposal systems were installed in 84 counties, 362 water systems were installed in 80 counties, and 52,335 farmers had animals tested for tuberculosis.

HOUSEHOLD MANAGEMENT AND HOME FURNISHING

The home-management project is gradually coming to take its place as a correlating influence throughout the program of home-economics extension work. There are but three home-management specialists in the 12 Eastern States, but it is probable that the work will develop more rapidly in the next few years. Home furnishing is also a promising project. In 1923, 13,277 home makers were reported as influenced by extension work to change practices relative to household management and home furnishing. Household equipment, kitchen arrangement, work planning, and furnishing and decorating were the principal home-management activities carried on during 1923. (Fig. 14.)

The following figures taken from the 1923 reports show that some work was carried on in a number of phases of this subject; 248 adult demonstrations were completed in budgets and accounts and 57 girls' club members completed their work in this project; 371 adult demonstrations were completed in household equipment, and 395 in kitchen arrangement.

⁶ U. S. Dept. Agr. Circ. 148, The farm woman's problems.

An item of interest reported is that in 3,570 homes new equipment, other than heat, light, water, and sewage systems was installed. This equipment included hand washing-machines, power washing-machines, fireless cookers, pressure cookers, hand sweepers, power vacuum cleaners, and kitchen cabinets. The development and distribution of electrical power in rural communities is likely to be extended during the next few years, carrying electricity into the farm home, thus making possible greater use of labor-saving equipment.

The principal emphasis in home furnishing, according to the reports, was placed on repairing and refinishing furniture. The 12 Eastern States are particularly rich in old furniture of simple and beautiful lines and durable construction. Many of these old pieces have been brought to light from attics, repaired, stained, and restored to add to the comfort and charm of the



FIG. 14.—Working surfaces should never be too low for convenience and comfort, but should be adjusted to meet the needs of the home maker. Better household equipment, kitchen arrangement, work planning, and furnishing and decorating were emphasized by extension agents in the Eastern States in 1923, who reported that approximately 13,300 home makers were influenced to change practices in household management and home furnishings

living quarters of the home. Reports give 2,506 home makers as repairing furniture and 1,184 as redecorating and refurnishing rooms.

By means of home-management tours, valuable experience was acquired by farm home makers during 1923. Home conveniences and remodeled homes, well-planned and well-furnished, were brought to the attention of home makers through tours carried on in a number of the States. Eleven counties reported 41 dwellings constructed according to plans furnished, 12 counties reported 64 dwellings remodeled according to plans furnished, and 442 kitchens were rearranged.

Comparatively little work was done by members of girls' clubs in the home-management project, since the work obviously carried with it major responsibilities not in keeping with the best training of the adolescent girl. There are, however, certain routine household tasks, such as the use of labor-saving devices, in which girls may have a part. In the home-furnishing project, fine results in room improvement were obtained in club work.

EXTENSION WORK IN THE NORTH CENTRAL STATES

G. E. Farrell, Regional Agent in Charge

STATES: Ohio, Michigan, Indiana, Kentucky, Wisconsin, Illinois, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas.

Substantial results in extension work in the 13 North Central States were recorded in 1923 and indicate that farmers and their families in those States were not permanently discouraged by the heavy financial losses sustained during a continued period of agricultural depression. Reports show that the advice and assistance of extension agents were increasingly sought during 1923 and that the agents in these States were made to feel by the farmers and farm women that their counsel and leadership were being heavily counted on in the general effort to work out a satisfactory readjustment to existing agricultural conditions.

The magnitude of the readjustment that has already taken place may be understood from the fact that in South Dakota the corn acreage occupies 42.8 per cent of all crop acres, an increase of 1,850,000 acres, with a reduction of 774,000 acres of wheat. Dairy cattle worth more than \$4,000,000 were shipped out of Wisconsin alone to meet the adjustment from grain to diversified farming in other sections.

PERSONNEL

In this area on July 1, 1923, there were 836 county agents, 112 home demonstration agents, and 51 county club agents working in the counties. The supervisory force consisted of 121 people, including the directors of extension. There were 214 full-time and 46 part-time subject-matter specialists in agriculture, and 63 full-time and 6 part-time specialists in home economics.

The supervisory staff in each State makes the contact with the county appropriating bodies and the farm organizations. It trains the county extension agents in field and office work and assists in developing the general plans and policies for extension work in the counties. The part of the supervisory force that deals with home demonstration work and boys' and girls' club work devotes most of its time to the organization of groups, the training of local leaders in the counties, and the training of county extension agents and specialists in the proper method of organizing women and young people.

The specialists in their respective fields develop plans for effective demonstrations. They train county agents in the subject-matter phase of the work and conduct the local leaders' training schools. These specialists make their headquarters at the college but spend half of their time in the counties working with the county extension agents and farm people. The time spent at the college is devoted to preparing publications and similar material and answering correspondence incident to the work.

Where the income of the farm organizations in the 13 North Central States decreased, their contributions toward the salary and expense of the county extension agents decreased. The farmers met this decrease in income by increased appropriations from county taxes. In Minnesota the average county appropriation increased from \$2,184 in 1922 to \$2,201 in 1923. Similar increases have been recorded in Wisconsin and Kansas.

REGIONAL PROBLEMS

The task of readjusting agriculture to the new conditions, with the limited force available in the extension service, was accomplished only because the farmers and home makers gave an unusual amount of their time and energy to carry to completion the program planned by the community. Farmers and home makers acted 223,742 days as local leaders in obtaining demonstrators, arranging meetings, attending program conferences, and organizing and instructing new groups. This was equivalent to approximately 745 men and women working full time for a year.

The farmer by increased effort made strides in meeting the new condition. In Paulding County, Ohio, for instance, the population has decreased from 27,528 in 1900 to 18,736 in 1920. The production of grain has increased from 189 bushels to 263 bushels per person in the county. In the same period the size of the average farm increased from 66 to 102 acres.

The decreased farm income has introduced new problems into the home makers' duties, particularly as to conservation of the income. The extension

service was called upon to give instruction regarding clothing selection, construction, and renovation. The problems of efficiently feeding the family at a minimum of cost received much consideration, and instruction was given regarding the home garden, home canning, hot school lunches, and better selection and preparation of meals.

The low purchasing power of the farmer's dollar, the violent readjustment in the value of farm lands, bank failures, and price readjustment have made it necessary for the farmer to have some one at hand to whom he could turn for unprejudiced counsel and advice. The extension service has been able to supply this needed help, based on sound economic studies.

In North Dakota representatives of the extension service analyzed the cropping systems of the State and pointed out the fallacy of continuing the one-crop system of farming. They showed the necessity of producing more home-grown feed and, through a reasonable livestock and dairy program, of utilizing profitably the farm labor over a longer period of the year. As a result of a carefully prepared program, 363 adult demonstrations in sweet-clover production were conducted, improved practices in alfalfa production were adopted on 558 farms, and 325 purebred dairy animals were obtained.

That the services of the specialists, county extension agents, and supervisors are valued is shown by the stability of the work in the North Central States. In 1922, 1,027 county extension agents were employed, and in 1923 the number was reduced to 999. This reduction of less than 3 per cent occurred in Michigan, Missouri, Nebraska, North Dakota, South Dakota, and Wisconsin, where depression was most acute.

ECONOMY IN FARM OPERATION

Economy of operation has been the keynote of the extension program, the immediate result of which has been the elimination of inferior, unprofitable stock. A total of 57,229 farms culled flocks for unproductive poultry, and sires that had a tendency to reduce the productivity of the herd were sent to the butcher. Farmers in the Corn Belt maintained cow-testing associations to eliminate unproductive cows.

Swine-production work was conducted more efficiently in 1923 by raising large litters, controlling the roundworm, and feeding more efficiently. Ton-litter demonstrations were conducted in Illinois, Indiana, Iowa, Ohio, and Wisconsin.

The large increase in alfalfa alone, due chiefly to the emphasis placed on legumes in the extension program from 1919 to 1923, is indicative of the results achieved (Table 8):

TABLE 8.—*Increase in alfalfa acreage in some North Central States, 1919-1923*

State	Acres	State	Acres
Illinois.....	47,000	Minnesota.....	78,000
Indiana.....	43,000	Missouri.....	34,000
Iowa.....	39,000	Ohio.....	19,000
Michigan.....	264,000	Wisconsin.....	85,000

Efficient farm operation is determined by a number of factors, but foremost among them is good seed. Every State in the north central area has one or more pure-seed associations inspecting and certifying seed that is true to type and of high-yielding quality.

Dairy products, especially whole milk, have come to be recognized as a most valuable food for growing children and adults, and therefore require extreme care in production and handling. To improve and safeguard the supply, farmers made rapid strides in eliminating animals affected with livestock diseases. More than 2,000,000 cattle were tested for tuberculosis in 1923. Farm sanitation, ventilation, and quality home-grown feeds did much to improve the quality of the milk supply for both urban and rural consumers.

ECONOMY IN EXTENSION WORK

In the improvement of production and marketing of farm products and the improvement of the farm home the extension service took a leading part in 1923. In keeping with the economy program practiced by farmers, the exten-

sion divisions in the North Central States economized wherever possible. The number of State supervisors of county extension agents was reduced. The number employed in the North Central States in 1923 varied from one supervisor for each 11 agents in North Dakota to one supervisor for 25 agents in Iowa. Detailed plans were made enabling extension specialists to work in a number of counties on a single trip. Related lines of work were consolidated under a single specialist or, in the larger States, division of territory resulted in more intensive work with less travel. Careful studies were made to determine the relative economy between printed and mimeographed material. The stenographic force was reduced. Conferences of extension workers were reduced in both number and length. District meetings of agents for supervisory instruction and subject-matter training resulted in the saving of both time and money.

LONG-TIME PROGRAM OF WORK

The war demand for production at any cost and the depression immediately following made it impracticable during that period to attempt long-time plans for agricultural improvement and home development. The year 1923, however, offered timely opportunity to begin this much-needed work. The methods used in the various States of the Corn Belt differed somewhat, but the results were plans that could be followed through a series of years in developing the extension program.

In Illinois a committee of farmers met with the representatives of the college of agriculture of the University of Illinois and developed such a program for the State. In Indiana areas were selected and extension specialists and agents joined with the farmers in gathering data regarding the region. These data were studied at the college and a program of work prepared. This program was reviewed and revised by the farmers and home makers of the area. It was then explained to the various communities of the area and a tentative program outlined. From this general program the community plans were developed. The long-time program will be used for the next 8 or 10 years as a basis for determining the program for each year. It insures a specific undertaking each year that, when completed, makes a worth-while part of permanent community development. Similar efforts were made in Nebraska, Ohio, and North Dakota. The results obtained in the use of a long-time program in dairy and pure-seed development work in Wisconsin prove the value of this type of extension program. A long-time program for dairy improvement, developed 25 years ago and continued since that time, has brought that State to the front in the production of whole milk and cheese.

The data accumulated in the last 10 years from farm-management demonstrations and surveys have proved invaluable in organizing long-time programs of work. More valuable than the data, however, has been the experience gained by farm-management demonstrators, who have proved capable leaders in the new program development. In Ohio the program development has been made a part of the farm-management demonstrator's program.

COUNTY EXTENSION WORK

County agents reported extension programs organized in 11,278 communities in the North Central States in 1923. The agents averaged 13 communities per county with extension programs worked out cooperatively by the agent and the people concerned. The people entered enthusiastically into the work outlined by the communities. More than 62,400 voluntary county and local leaders assumed responsibility for placing demonstrations, holding field meetings and tours, and training local demonstrators with adults. Club work with boys and girls required the services of 11,826 local leaders to direct the demonstration activities of the 127,898 members enrolled. The agents in this area averaged 463 farm visits for the year. Programs that looked toward the improvement of the farm home were developed by 539 agents, who made 57,322 home visits, an average of 106 for the year.

County extension agents maintained office days. Farm and home makers used this office day to obtain information and assistance from the agents. Agents reported that 1,947,070 calls for counsel and advice were made at their offices. This was the equivalent of 1,943 persons calling on each agent in 1923.

The large correspondence of agents also indicates that extensive use is made of the agent by the people of the county. During 1923, 1,011 agents reported 1,472,228 individual letters written, or an average of 1,456 letters for each

agent. In addition to the office calls and correspondence, the agents sent out more than 8,600,000 copies of circular letters and prepared more than 107,000 articles published by the press. This volume of office work was turned out by the agents in addition to the regular routine of maintaining office records and planning, incident to the field work. About one-third of the agents' working time was devoted to office work.

County organizations of farm men and women formed to cooperate with agents in carrying out extension programs showed a membership of 445,764. A large percentage of this membership took an active part in the extension program, and 161,725 took special training from the county extension agents and specialists in 11,311 training schools. Meetings to observe and study demonstrations attracted 1,381,979 people, and farmers' institutes and short courses enrolled 1,131,422.

HOME DEMONSTRATION WORK

DEVELOPMENTS

During 1923 the outstanding developments in extension work with the farm home in the North Central States were:

- (1) The increased number of counties without home demonstration agents in which assistance was rendered to farm women and girls.
- (2) The large number of farm women who participated in the program as local leaders trained in subject matter or in administrative duties or both.
- (3) The large number of improved practices adopted by home makers.
- (4) The development of State programs of work.
- (5) The recommendation of all subject-matter specialists as to county or district project needs, as a preliminary to building county or community programs of work.
- (6) The increased attention given by agriculturally trained extension agents to arousing interest in a home program in counties not financially able to support or not informed regarding home demonstration work.
- (7) The general spread of the practice of basing instruction on simple practices.
- (8) The increased attention given to extension methods of teaching.
- (9) The increased use of publicity regarding results of home demonstration work.
- (10) The coordination of the several phases of home demonstration work into the single objective of the "well-rounded" home.
- (11) The confinement of home demonstration work to those phases which contribute to solving fundamental problems rather than those which merely entertain women.
- (12) The increase in the number of home-demonstration agents carrying junior as well as adult programs.
- (13) The planning of cooperation with other organizations before undertaking project work instead of planning such cooperation after the work was under way.
- (14) Obtaining the cooperation of commercial interests in carrying out educational programs of work.

The increased interest manifested by State extension directors and agricultural agents of the North Central States in developing home programs was most encouraging. It is realized that the continued economic distress will probably make it difficult to increase the number of home demonstration agents in any marked degree in the immediate future; but, through the service now being rendered by State agricultural colleges in counties without home demonstration agents, the value of home demonstration work is to some degree being made known to the people.

The development of home demonstration work was further affected by the change in plans for State supervision of county extension work made in a majority of the North Central States during 1923. Most States unified all administrative responsibility with the county by dividing the State into three or four districts, each supervised by a district agent, who was made responsible for the administrative supervision of all extension work in the district, including work in home economics and agriculture with both adults and juniors.

Ohio had three supervisors in each district, one supervisor trained in home economics, one in agriculture, and one in boys' and girls' club work, who were jointly responsible for the progress of the work within the territory. In other States only one supervisor was appointed in each territory, the personnel usually consisting of the former State county agent leader and assistant county agent leaders.

This plan of supervision is in its infancy, but in those States where the district agents were given training and supervision by the State home demonstration staff as to their opportunities and responsibilities in supervising home project work, the plan worked satisfactorily. Supervision of home project work was especially difficult for district agents in counties having no resident home demonstration agents. In such counties subject matter and administration were frequently so closely related as to require a knowledge of subject matter in order to give adequate advice regarding administrative procedure.

In States where it was inexpedient to have two supervisors in each district, effort was made to help supervisors through conferences of the extension director, State home demonstration leader, and district supervisors. At these conferences the supervisors received suggestions regarding home-program needs in the several counties, and the district supervisors reported to the home demonstration leader and extension director regarding field activities and advice given.

ORGANIZATION

In 1923 local people of most of the North Central States assumed entire responsibility for membership in the county extension organization and greatly increased responsibility for county administration of the work. In those States where a single membership includes all members of the family the women took increased responsibility in organization and project activities. With the exception of Wisconsin, Illinois, and Kentucky, the farm bureau was the most active agency in promoting the extension program of work. In Illinois there was some tendency toward coordinating the work of the farm and home bureaus. In Kentucky all work was carried on through home demonstration clubs. In counties having home demonstration agents in Michigan, Indiana, and South Dakota, groups of women were well organized on a community basis, but not as a part of the farm-bureau program.

In Wisconsin the home demonstration agent worked with many organizations of the county and instructed farm women regarding improvement of home practices through such means as short courses and talks before clubs. In Illinois, home-bureau units were organized by the home adviser (home demonstration agent) as a separate organization unit. In Ohio, Iowa, Missouri, Nebraska, Kansas, and Minnesota, the home demonstration work in all counties was a definite part of the farm bureau program of work. Indiana and Nebraska entirely revised their plans for development of the home part of the extension program.

In every North Central State, except Kentucky, some home project work was undertaken in counties without home demonstration agents as a means of bringing to the attention of farm people (1) the need of bettering farm-home and community conditions and (2) the value of the county home demonstration agent in bringing about the desired condition. In North Dakota home makers' clubs were formed in counties without home demonstration agents through the effort of the county agricultural agents of such counties. In South Dakota two types of work were carried on: (1) Four-county home demonstration agents were employed, who instructed local-leader groups by rotating their service one week of each month in each of the four counties, and (2) in counties having no home demonstration agents, local leaders were trained for the work by specialists. In Wisconsin, where there was but one county home demonstration agent, the State office made contacts with local groups. Upon the request of five communities of a county, a specialist visited the county and trained groups of local women. In Michigan, county agricultural agents of counties without home demonstration agents aroused interest in a home program which the State home demonstration staff then organized and developed through local leadership. Iowa tried an experiment of a four-county specialist, who trained local leaders in one project only in each of four counties.

BOYS' AND GIRLS' CLUB WORK

Boys' and girls' club work continued to occupy an important place in the extension program of the North Central States in 1923. The work continued to grow more substantial as an agency to bring about the immediate improvement of agriculture and home life through the wider use of better practices (fig. 15). Reports indicate that specialists gave more time to the preparation of instructions and to training leaders. County extension agents used club demonstrations not only as a means of educating the young people themselves, but as one of the potent forces that arouse public interest and stimulate people to act.

Although supervisors, specialists, and county extension agents manifested increased interest in boys' and girls' club work, the enrollment of 124,666 boys and girls is a reduction of 19 per cent as compared with the previous year. This apparent inconsistency was brought about by the reluctance of boys to undertake agricultural demonstrations under the present market conditions for farm products. In most cases the pig, the baby beef, or the dairy calf

represents the boy's entire capital. He is rather reluctant to undertake a business deal that may cause the loss of all his labor and part of his investment. Of the number enrolled, 79,155 completed all work.

The desire for education resulted in 733 club boys and girls attending college. Of the 10,129 clubs organized, 67 per cent were standard clubs. More than 3,000 demonstration teams and 750 judging teams carried the story of club achievement to practically all community gatherings and fairs where people assembled who were interested in the better things of the farm and home.

The tangible products of the demonstrations are evidence of the large amount of work performed by young people in demonstrating the value of practices used. Some of these products are 241,615 bushels of corn and 107,189 bushels of potatoes raised, 4,888 head of dairy cattle, 4,128 of beef cattle, 2,386 of sheep, 29,411 of swine, and 182,320 of poultry produced, 24,549 meals prepared, 40,000 loaves of bread and 35,000 dozen quick-breads baked, 200,000 quarts of fruit canned, and 75,000 garments made. So much hope and promise lies ahead in the undeveloped portion of this project that it is no surprise that the leaders

are demanding more help to extend its usefulness and inspiration to a larger number of farm boys and girls.



FIG. 15.—Boys' club member and his herd of hogs. In the North Central States approximately 19,700 farm boys and girls were enrolled in pig clubs, 6,300 in growing dairy stock, and 4,450 in growing beef animals, supplementing 12,290 livestock demonstrations carried out by adult farmers in cooperation with extension workers in 1923

FARM ACTIVITIES

MARKETING

The buyers' market brought about by the surplus of agricultural products has created a desire on the part of the farmer to market his product cooperatively. The extension service was called upon to counsel with the farmer on the type of cooperative marketing organization to form, the contract most suited to the needs of such an organization, the laws governing its operation, and the grading and packing of products. The experience of cooperative organizations during the last five years has brought forward managers of experience and judgment. In 1923 the extension

service continued to conduct training schools for managers, supplying them with economic information and counseling them against uneconomic practices, such as price fixing. It gave them help in organizing records.

During 1923 more than 2,700 existing cooperative marketing organizations, with a membership of 335,000, purchasing supplies amounting to \$13,600,000, and marketing farm products valued at \$120,000,000, advised with the extension service in the conduct of their affairs. In 1923 the extension service also gave assistance in the organization of 496 new cooperative associations, which purchased \$842,600 worth of supplies and sold \$30,500,000 worth of farm products.

County extension agents did not act as managers or directors of these organizations. They counseled with the officers, who assumed full responsibility for business transactions and results obtained. In some cases the farmers desired the extension agent to act as business manager, but upon careful consideration they agreed that it would be inadvisable to expect such service from a public official supported by public funds.

Inexpensive credit is essential to satisfactory farm operation. The extension service, through its extension agents, assisted 67 groups of farmers to organize to take advantage of the cheap credit offered by the Federal farm-loan banks and other cooperative credit associations.

FARM MANAGEMENT

Farm management demonstrators assisted groups of farmers to keep accurate farm-business records and to analyze them at the close of the year. For the purpose of analyzing the farm business to show how the labor income might be increased, 25,000 account books were distributed, 8,300 complete records were kept, and 3,000 records were analyzed. As a result of the record

analysis, 2,800 farmers adjusted their farm business. More than 1,800 boys and girls were enrolled in farm-record clubs and 790 completed the year's work in a businesslike manner.

The question of farm leases was discussed with landlords and tenants and a satisfactory basis of relationship determined by committees representing both parties. The conferences resulted in a more satisfactory method of leasing farm land. More than 3,500 farm owners and tenants are operating under improved contracts.

In the harvest season the demand for labor ordinarily exceeds the supply. County extension agents assisted nearly 14,000 farmers in making better use of labor.

Farmers looked ahead during 1923. They called for information on the trend of farm prices, on supply and demand, and on many other economic



FIG. 16.—County agent demonstrating proper time to cut alfalfa. During 1923, approximately 38,000 farmers in the North Central States were reported as following improved methods of alfalfa production recommended by extension workers, of which 19,000 farmers planted selected seed, and 23,500 farmers inoculated the soil

factors that enter into the operation of a farm. The farm management demonstrator supplied this information through addresses at public meetings, news articles to the public press, and similar methods.

AGRONOMY

The outstanding work in agronomy in the North Central States in 1923 seems to have centered around a comparatively few activities. First in importance was the development of feed crops—alfalfa in Wisconsin and Michigan, soybeans in Missouri, Illinois, and Indiana, and pasture improvement in Ohio (fig. 16). Second in importance was the crop-improvement work, including standardization of varieties, development of sources of seed of proved varieties, and seed inspection and certification. Wisconsin reported an increase in alfalfa acreage during 1923 of 50 per cent, or 50,000 acres. It is estimated by the writer, however, that a total of 2,000,000 acres will be required to furnish enough legume feed for the State. Michigan increased the alfalfa acreage from 193,000 in 1922 to 350,000 in 1923. In 1922 a goal was set in Michigan for 500,000 acres of alfalfa in three years' time. However, the rate of progress has been so rapid that Michigan farmers expect to reach the goal in two years.

Soybeans continued to be an outstanding legume in 1923, the most important work being done in Missouri, Illinois, and Indiana. Not only was a large acreage developed, but standardization of varieties was accomplished in various sections. The soybean crop was about the only legume which increased in acreage in Missouri. Soybeans are being grown in the North Central States principally for hogging-off and for hay, seed, and oil production.

Pasture-improvement work continued among Ohio farmers, especially in the eastern and southeastern parts of the State. The eastern half of Ohio reported 709 pasture-improvement demonstrations under way in 1923.

Seed improvement.—The standardization of various crops is well under way in most of the North Central States. Much more attention was paid during 1923 to developing sources of pure seed, especially for use in local communities. All the States did some work in developing sources of seed, outstanding examples being that in Michigan, Wisconsin, and Illinois.

Corn, as well as small grains, was included in seed inspection and certification work in 1923. Some inspection of corn was undertaken in Illinois and Michigan. In these two States the work with corn is on a par in quality with the inspection and certification of small grains.

An outstanding piece of work was that in tobacco improvement in Kentucky. More than half the time of the agronomy specialist was given to this activity, which consisted largely in demonstrating root-rot resistant tobacco. Demonstrations were held in more than 70 counties, of which approximately half did not have county agricultural agents.

Soil improvement.—The two lines of soil improvement especially emphasized during 1923 were with limestone and the standardizing of various fertilizer formulas. The limestone work consisted of campaigns urging the use of more limestone, the development of local sources of limestone, including marl deposits, and the building of lime bins.

Lime campaigns almost state-wide in character were carried on in Missouri and Michigan, whereas work restricted to individual counties was prominent in Illinois and Iowa. The Illinois specialist's report indicates an increase in the use of lime from 50 to 1,000 per cent in some counties. One county shipped in six trainloads of limestone. In Missouri "clover-prosperity" campaigns were held in 26 counties. More than 30,000 people were reached as a result of the 41 meetings held.

The development of local sources of lime was emphasized in Wisconsin and Kentucky. In Wisconsin, limestone deposits in hillsides were developed, as were also deposits in marl lakes over the central and northern parts of the State. Local lime bins were advocated in both Ohio and Indiana. In Ohio a few silo-type bins have been erected. These have proved expensive, however, it being necessary to handle approximately 1,000 tons of limestone each year to pay interest on the overhead cost.

In Missouri and Ohio special fertilizer work was carried on, including standardization of a few formulas of high-analysis fertilizers. This was followed by meetings and conferences to get the local dealers to eliminate the low-grade fertilizers and use only the kinds recommended.

LIVESTOCK

Although the market has not been favorable to the production of beef cattle, the farmers of the North Central States continued to show faith in the industry. They worked particularly with the extension service in 1923 to improve feeding methods to decrease feeding costs. The outstanding change in the method of conducting extension work in beef production was the addition of cost estimating to the feeding school, such as carried on in Minnesota. The farm management demonstrator took part of the day at the feeding school to work out with the farmers the items entering into the cost of producing beef and the market outlook for this product. This enabled the producer to determine how efficiently he was operating and the changes in his practice and management that would be necessary to make the enterprise more profitable. Practices with beef cattle on more than 30,000 farms were influenced by the extension program.

Purebred-sire campaign.—The purebred sire plays an important part in the economical operation of the farm. Ohio has led the Nation in the introduction of purebred sires. Farmers in the North Central States, assisted by the extension service, obtained 2,700 purebred beef bulls in 1923, and 771 farmers procured purebred animals for the first time.

The beef animal has proved popular in boys' and girls' club work. In 1923, 4,452 members were enrolled in beef clubs. Creditable showings of animals were made at the State fairs, and many of the young exhibitors won places in the open classes in competition with adult breeders. Large exhibits of excellent quality were shown at the Iowa State Fair, the Junior Livestock Show at the South St. Paul stockyards, the International Livestock Exposition, and the American Royal Livestock Show at the St. Joseph, Mo., stockyards.

Dairying.—The dairy industry proved a very satisfactory farm enterprise in the North Central States throughout 1923. The farmers, in cooperation with the extension service, made good progress in improving production methods. More than 2,000,000 dairy animals were tested for tuberculosis under the supervision of the Federal Bureau of Animal Industry and State authorities, and 436 cow-testing associations with a membership of 10,000 tested 150,000 cows for production.

The dairy project continued to attract farm boys and girls, and 6,300 enrolled in this work in 1923. The value of dairy stock of club members who reported was \$367,872. Club members, with their dairy animals and demonstration teams, are a regular attraction at county, State, and interstate fairs. Breed associations recognized the value of young people to the industry by employing special workers to assist the regular extension forces. One of the largest dairy-breed associations offered special rates to club members in registering animals. All associations provided liberally for prizes to stimulate the young people in more efficient dairy production.

Sheep.—Lambs and wool had a satisfactory market during 1923. The farmers of the spring-wheat belt introduced small bands of sheep with excellent results. The trimming of lambs for the early summer market was an outstanding piece of work in Kentucky. The demonstration was made more convincing by an auction sale of these lambs at the Lexington market. They were graded and trimmed properly and netted the producer an increase of \$2 per head.

HOME ACTIVITIES

HOME MANAGEMENT AND HOME FURNISHING

Kitchen arrangement, kitchen equipment, refurnishing of rooms, refinishing of furniture, and household accounts received major attention during 1923. The kitchen score card stimulated interest in improved equipment and in efficient arrangement of major equipment. More than 4,300 homes installed new equipment, and 2,626 kitchens were rearranged.

Refurnishing and redecoration of rooms received impetus largely through the junior "own your own room" project, and the record of 2,706 redecorated and refurnished rooms in the 13 North Central States was due in large measure to the efforts of club girls.

Interest in keeping household accounts for a short time as a basis for budget planning was shown in a few States. Accounts were kept by 2,187 women, who expressed real appreciation of the service rendered by the specialists in interpreting these accounts in their relation to reductions in expense or to better living.

CLOTHING

During 1923 increased interest was shown in selection of materials and of ready-made garments. The relation of hats, garments, shoes, and accessories in forming an appropriate and becoming costume was emphasized, as was the relation of clothing to health.

Construction and remodeling continued as the major activities of the clothing project. However, emphasis was also given to studying the main problems of correct line and design, and to making basic patterns adapted to the figure of the individual which could be used in making any or all garments without fitting or later adjustment.

Millinery was also a popular phase of this project, and increased emphasis was laid upon its selection and relation to the costume. Children's clothing received more attention, and mothers as well as girls made many garments, which were well constructed, simply yet attractively decorated, and easily laundered or renovated.

Junior club members made 75,368 garments, and 86,310 homes reported one or more improved practices in relation to clothing as the result of work with adults and juniors. Garments made during 1923 show simplicity and conservatism in materials selected as well as in line and design.

FOODS AND NUTRITION

Improved methods of food selection and preparation in their relation to positive health was the outstanding feature in this project. Housewives planned food budgets based on family needs for the entire year and planted the necessary garden acreage with a variety of green vegetables and fruit. Preservation of these foods, particularly through storage and canning, was also emphasized.

The food-habits score card and the food calendar were used as helpful means of working out well-balanced meals. Men as well as women, boys, and girls were interested in scoring their own food habits and in making such changes as enabled a later scoring to show marked improvement. Corrective diets were also planned, and cases of underweight and overweight, constipation, prenatal and postnatal feeding, and other special phases of nutrition were also given attention as needs warranted. A total of 72,335 families improved one or more practices in regard to food selection, 28,527 reporting use of more green vegetables, 41,830 more milk or other dairy products, 19,960 more fruit, and 9,921 more unrefined cereal products in the diet.

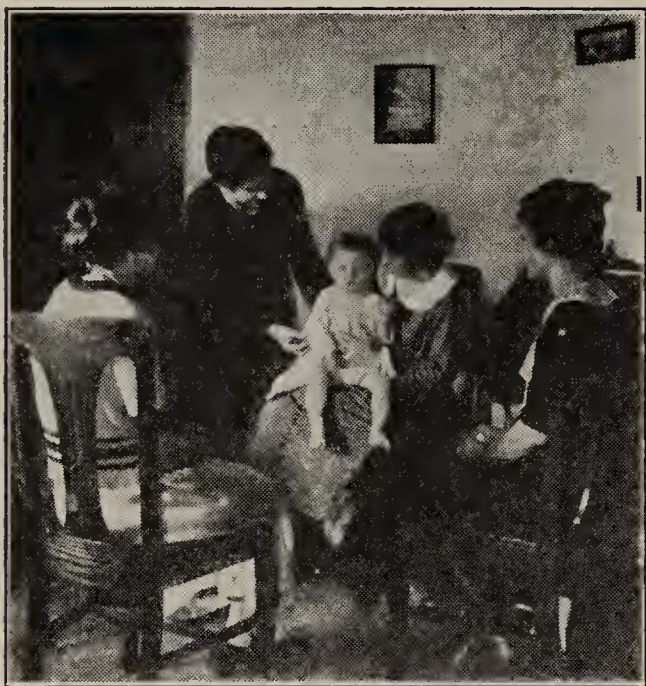


FIG. 17.—County home demonstration agent instructing young mothers in the characteristics of a healthy child. Health as a positive thing rather than as absence of disease was given widespread attention in the extension program in the 12 North Central States in 1923. Standards were set for each member of the family, and food, clothing, exercise, rest, and other health factors were studied in their relation to attaining the standards set

The food habits of girls and boys were given special attention, and reports indicate that, through home demonstration work, 19,252 home makers were influenced to change practices in child feeding and care, 34,252 children being reached. Hot school lunches, more milk, better family meals, and improved habits of sleep, rest, and play contributed to the record achieved.

HEALTH

Personal and family hygiene, through definite health project work, was emphasized in 1923 in Ohio and Missouri, where health specialists were employed. In all of the North Central States such projects as food, clothing, and home management as they relate to health were emphasized (fig. 17).

In the States where health projects as such, were undertaken, the major emphasis was on home care of the sick, first aid, and such phases of sanitation as screening of houses or other methods of eliminating flies, mosquitoes, and other insects. A total of 14,110

home makers reported improved methods in home care of the sick, 8,913 houses were screened, and 7,051 home makers reported other methods of insect elimination.

Health project work, particularly the home care of the sick, is of great value to rural people living in communities far removed from the service of doctors, nurses, and hospitals.

COMMUNITY ACTIVITIES

In addition to the projects already listed, assistance was rendered in many community undertakings, including recreation, rest rooms, traveling libraries, pageants, playground equipment, study-club programs, fairs, exhibits, and the like.

County extension agents did not confine their activities to the economic side alone. They organized recreation for juniors and adults. An opportunity to get away from home and meet with other boys and girls around the camp fire or in demonstration contests was provided for 72,000 boys and girls, the future farm men and women, in 1,091 rallies and club camps. The older people received much inspiration and pleasure from these meetings of the young people of the county, for 370,000 visited the club camps or participated in the club rallies.

County extension agents assisted farmers and home makers in arranging meetings by obtaining speakers, lantern slides, and motion pictures on extension problems. More than 3,500,000 people gathered in country schools, churches, grange halls, and homes to take part in these meetings and participate in the round-table discussions following the organized program.

During the summer months there is a lull in farm work between crop cultivation and harvest. Many farm organizations avail themselves of this period for county-wide picnics. Such picnics mean added work for the housewife and that farm chores must be done by lantern light. County extension agents in Kansas found a way for the farmer and his family to enjoy summer picnics without the attending overwork on the part of the mother and the disagreeable chores after dark. Field work is stopped at 4 p. m., chores are hastily completed, and the family eats supper at home. The family is soon on the road to the picnic ground, arriving there in the cool of the evening. Games are organized, and the play goes on until sundown, when the cars are arranged in a semicircle to supply lights for recreation. A screen is hastily erected, lights dimmed, and three or four reels of good pictures are exhibited. The family is at home and in bed before 10 o'clock. This plan is meeting with great favor where it has been tried.

OUTLOOK

Reports of county extension agents show that more work was accomplished in 1923 than in 1922. The problems of farmers and home makers were more evident and pressing than in more prosperous times and were attacked with more eagerness by both farmers and agents.

There was a slight decrease in the number of county extension agents employed. Records show a slight decrease in the funds contributed from private sources within the counties and a slight increase in the amount of funds appropriated from county taxes.

The unsettled conditions in the North Central States and the widespread demand for a reduction in taxes indicated that there would be no material increase in the State appropriations for extension work. We may look, therefore, for a small increase in the number of agents in the western tier of States in this section, where the work was temporarily discontinued during the last year. More efficient means of teaching and increased cooperation from the farmers and home makers will tend to increase the total volume of work performed.

The demand for the services of county extension agents, both men and women, has made the working hours long and strenuous. It will be necessary to look forward to rearranging their duties so that opportunity for rest and study may be provided in order to retain experienced workers in the counties. As the work grows older in the counties the problems to be met by extension workers become more complex, thus making it more difficult for inexperienced men and women to fill the positions satisfactorily.

EXTENSION WORK IN THE SOUTHERN STATES

I. O. Schaub, Regional Agent in Charge

STATES: Virginia, North Carolina, South Carolina, Georgia, Florida, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas.

The South, although it has been making unusual progress along industrial lines, is still primarily agricultural in its interests, and by far the greatest source of income and livelihood of the people is the farm. In the agricultural development of the 12 Southern States extension work in 1923 made an important contribution and continued to receive the confidence and support of the appropriating agencies of the several States and counties, of bankers, merchants, other business interests, and of the farmers themselves. This confidence was evidenced during 1923 as in previous years of readjustment following the period of inflation caused by the World War, by continued State and local financial support of the work. Approximately two-thirds of the counties employed agricultural agents, and one-half had home demonstration agents. In addition, there are more than 250 negro men and women county workers employed.

PERSONNEL

Material progress was noted in connection with the type of workers appointed as extension agents in 1923 as in previous years. In the beginning of the work practically all agents were mature men who had had practically no

college training, but who usually had been successful farmers. This type of agent fully served the needs in the early days. With the development of the work, however, and the progress made by the farmers themselves, there came a demand for better-trained workers. A few agents of the old type were still employed in 1923, but most agents are much younger men, usually from 25 to 35 years old, the majority of whom have had the equivalent of a four years' agricultural course, in addition to several years of practical farm experience. All the Southern States now follow the policy of appointing college graduates, and make exceptions only in special cases where available funds are insufficient to interest better-trained workers.

The length of time an extension agent ordinarily remains in the service continued to increase in 1923. During the war period the rapid turnover in county extension agents was a very serious handicap. A large percentage of the agents remained in a given county only one or two years, making the annual turnover from one-third to one-half of the agents. Since the war the turnover has decreased noticeably. During 1923 the county agent turnover in the Southern States was approximately 21 per cent and in one State as low as 11 per cent. The turnover of home demonstration agents was larger, being approximately 26 per cent for 1923.

DEVELOPMENTS

There were five outstanding developments in extension work in the 12 Southern States during 1923:

(1) A broadening of the scope of extension programs, with increased efficiency in the methods of their development and execution.

(2) Increased and united efforts in meeting the ravages of the cotton-boll weevil.

(3) Spread of the idea of self-governed, self-financed boys' and girls' clubs.

(4) Development of county home demonstration councils and local leaders for support of home demonstration work.

(5) Change in marketing activities from organization efforts to grading and standardization.

EXTENSION PROGRAMS

Marked progress was made not only in the method of developing extension programs but in the scope of the work undertaken in 1923. Since the inception of extension work all agents have had some kind of plan or program which they were endeavoring to "put over" in their particular county, or in a given region. Too often, however, this program was simply a reflection of the interest of the county agent or the enthusiasm of the specialist in a particular line. For several years this kind of program served its purpose; but, as the work developed and the people became better acquainted with the purposes and possibilities of extension work, it was realized that the farmers themselves should take a greater part in the development of the program and in its execution.

The first efforts toward program making were confined largely to individual communities. A few of the more progressive and successful farmers and farm women were invited to a conference, at which the conditions and the problems of the community were discussed and methods for the solution of the problems were outlined. This resulted not only in a better program because of the ideas brought forward by the people actually doing the work on the farm or in the home but in a marked increase in interest because of the change in attitude of the people themselves, in that they were helping to make the program instead of having one prepared and handed down to them. This plan also resulted in more or less definite organization in the community for the conduct of extension work.

In 1923 the agents reported 15,744 communities in which extension programs were planned cooperatively with the people concerned. This is more than twice the number reported in 1922 and represents nearly half the agricultural communities in the 12 States concerned. After a few communities in a county were thus organized, the county program was outlined. The methods followed were very similar to those used in the community, with the difference, however, that the people who cooperated in developing the county program divided it more or less along commodity lines, which resulted in the organization of advisory committees or councils on poultry, dairying, seed improvement, gardening, and other activities.

During 1922, and especially during 1923, the progress made in generally recognizing the fact that the economic progress of a given county or community along agricultural lines depends in a large measure on regional, State, and often national and world production, made it necessary to outline State programs based on the proper economic relationships between the various field crops grown, livestock production, and the industrial development of the State as a whole.

With these facts in mind, conferences were called in a number of States for the purpose of discussing and outlining, as far as possible, long-time extension programs. To these conferences were invited representatives of all farmers' organizations in the State, bankers, merchants, representatives of railroads, the agricultural press, representatives of the experiment station, and the teaching staff of the college. The conference as a whole was usually divided into communities representing the various farm activities, such as dairying, horticulture, livestock, and home improvement. After much thought and study these committees reported to the main conference, where further consideration was given to the coordination of their various recommendations.

This method of program development brought valuable support to extension work. Business men and bankers having a part in the development of the plans were impressed with the purposes of extension work and the soundness of the practices advocated. This has resulted in their using their influence with the farmers in their business relationships to adopt more up-to-date and efficient methods. In numerous instances credit was refused to the farmer where he desired money for production purposes, unless he would agree to follow certain successful practices recommended by the agricultural colleges and approved by the county and State program committees. In one Federal farm-loan district it was stipulated, before a loan was approved, that the borrower submit a statement from the county agent showing that his farm was properly terraced. In numerous instances the farmer was required to increase his production, at least his food and feed supplies, before he was given credit advances enabling him to grow his cotton or tobacco crops. In other cases livestock loans were not made so long as the farmer's fields were infested with cattle tick or unless the farmer agreed to follow approved practices in controlling the boll weevil.

Coincident with the development of such a program in one county, the county commissioners' court, the local appropriating body aiding in the financial support of the county agent, made a four-year contract for the employment of a county worker. Under the plan adopted the contract is made at the beginning of the commissioners' term of office, and definite goals are set up for achievement from year to year, and for the four-year period as a whole, with the idea that the turnover in county extension agents will be reduced and that the outlining of more definite plans of work for the county will be made more practicable.

MEETING BOLL-WEEVIL CONDITIONS

More than 30 years have passed since the boll weevil first made its appearance in Texas. Its spread north and east has been continuous, and during 1923 it practically covered the entire cotton area. The damage caused by the weevil, combined with unfavorable weather for cotton production, brought to the attention of everyone the seriousness of the problem facing the cotton farmers. Many thought that the South's dominance in cotton production was seriously threatened. Until within the last two or three years efficient methods for the control of the weevil had not been developed. The fight against its ravages had been indirect, in that farmers were encouraged to diversify their crops, and not to depend entirely on cotton for their sole cash income. During the past two years the method of poisoning boll weevils by dusting with calcium arsenate has been developed to the point where it is not only reasonably sure, but economically profitable. The combining of the indirect methods used in combating the boll weevil with the practice of poisoning has demonstrated that cotton can be produced successfully under normal conditions. Results obtained by these practices during 1922 and 1923 have discounted undue fear as to the future of southern agriculture and the continued production of cotton as the principal money crop of the Southern States.

During 1923 special emphasis was laid on the safe-farming program, which was first adopted in the Southern States in 1915 as a fundamental part of their

extension program, because it was recognized that the high prices paid for cotton would lead some less thoughtful farmers away from the production of food supplies in order that they might increase the cotton acreage. The safe-farming idea combines three cardinal principles: (1) The maintenance and building up of the fertility of the soil; (2) the production as nearly as possible of food for the family and feed for the livestock; and (3) the growing of a number of well-selected crops and livestock products suitable to the soil, climate, and market conditions. Statistics published by the crop-reporting service of the department in 1922 show that in the majority of the Southern States from 60 to 72 per cent of the farm food supply was produced on the farms where consumed. These percentages are larger in this group of States than in any other area of the United States. The soundness of the safe-farming program was again demonstrated in 1923 when unfavorable weather conditions and boll-weevil damage in practically all the cotton States resulted in a reduced yield of cotton.

SELF-MANAGED BOYS' AND GIRLS' CLUBS

A few years ago Arkansas State club leaders outlined a plan whereby club members would make their own rules and regulations, prepare budgets covering expenses, and raise funds necessary for carrying on the work. This plan achieved such good results that it was adopted not only by Arkansas, but by adjoining States.

During 1923 there was unusual development along this line, and nearly all of the 12 States organized at least a few, and, in many instances, practically all of their counties on this basis. In most Southern States boys' and girls' club members in a community belong to one club, with a number of activities carried on by various members. Some may be growing corn, some may be producing hogs, others may be gardening, canning, or doing clothing work; and in many instances one member will be engaged in two or more activities.

In some States the members engaged in a given activity elect a leader or captain from their group, who is responsible for calling them together for instruction, and who reports to the club the progress made in his or her line of work. Each club has its own officers, consisting of president, vice president, secretary, and treasurer. The officers of the community clubs come together to form the county executive committee, which meets one or more times during the year. This county executive committee makes its own rules and regulations as regards the points to be taken into consideration in competitions, sets up definite goals of achievement, prepares a budget to cover the expenses of the county organization, and allots the proportionate part of the budget to be raised by each community club.

In several States the idea has been carried farther, so that the county club officers come together once during the year to form a State executive committee. This type of organization has resulted not only in increased efficiency in the adoption of better farming and home-making practices but in the development of community spirit on the part of individual workers. This is particularly true where this type of organization has been in effect for two or three years. The individual member has become interested in the success of his club rather than in his individual achievement. In 1923 hundreds of boys and girls were sent to club rallies and State short courses as delegates from the community club or from the county, their expenses being paid from funds raised by the club. The clubs also looked after the enrollment, collected reports from individual members, and otherwise carried on the business as a self-perpetuating organization, and thus relieved the extension agents of many details and permitted them to give more time to the larger problems and general guidance of the club work as a whole. This type of club organization is perhaps the outstanding development in the progress of club work since its inception.

COUNTY HOME DEMONSTRATION COUNCILS

The outstanding development in the home demonstration work during 1923 was the organization of county councils in most of the 12 Southern States. The councils act as advisory boards and meet with the home demonstration agents once a month, or sometimes less frequently, to give reports of progress and to help plan future work. Contrasting with this method home demonstration work in the beginning was conducted largely through organized groups of girls. It naturally followed, when the work was broadened to take in women

also, that the organized group idea would be continued. Accordingly, work with farm women has been on a better organized basis than work with men. These group organizations usually centered in a community. After a number of communities had been organized in this manner the need was felt for a type of county organization that could function for the county as a whole in the same manner as the local organization served the needs of the community. Accordingly, representatives from the local community clubs were brought together to form a home demonstration council. These representatives were usually women who had been outstanding demonstrators for two or more years.

In many instances members composing the county councils appeared before boards when appropriations were asked for the support of the home demonstration agent and also answered any complaints of the work that might be made from time to time. Their experience in conducting club meetings and working in an organized way made them very valuable assistants in planning county and community fairs, in arranging for marketing surplus products, and helping to put over county-wide campaigns. They likewise brought to the agent the value of their practical experience in developing the extension program. In a few instances State councils have been organized. During 1923 home demonstration agents reported 7,576 organized communities where the people themselves helped to make the program of work. They also reported that there were 14,769 local adult leaders and 11,209 junior leaders who aided in guiding the extension activities in an organized way.

CHANGE IN MARKETING ACTIVITIES

Marked progress was made in the production of higher quality of farm products in 1923 as a logical development of the widespread interest in marketing problems in these States during the past few years. It will be recalled that the deflation following the World War and the prices received by farmers for their products in comparison with what they had to pay for the commodities they purchased resulted in an insistent demand on the part of growers for more efficient methods of marketing. It was believed that if the farmers were organized along commodity lines for the sale of their products much of the difficulty in connection with marketing would be removed. In response to the strong demand for accomplishing such organization much time was devoted for two or three years by county extension workers to aiding farmers to form organizations for marketing such commodities as cotton, tobacco, peanuts, potatoes, watermelons, cantaloupes, and truck crops.

By the end of 1922 associations of this type had been formed in all Southern States, and the actual business management was assumed by the officers of the associations, or people employed specifically for that purpose. One of the fundamental principles adopted by these associations was that the commodity should be sold on grade, and the producer paid on the basis of the quality of product produced and delivered to the association. This change in practice in connection with the sale of farmers' products resulted in an unusual demand by the farmer for aid along those lines which would enable him to produce a higher standard product, such as selection of better seed, control of insect pests and diseases, use of better harvesting practices, and grading and packing of the product itself, to which the extension forces effectively responded.

GENERAL STATUS OF DEMONSTRATIONS

In all lines of extension work the concrete, definite demonstration on the farm or in the home is fundamental, and every agent incorporates as part of his program demonstrations which serve to prove the value of better practices. Formerly the demonstration to a certain extent appeared to be for the benefit of the individual on whose farm the work was conducted. Now the idea of the demonstration serving the community as a whole is recognized and developed in each of the 12 States. The advisory committees in the communities assist the county workers in determining the number of demonstrations necessary and selecting the individuals to carry out such demonstrations.

Certain types of demonstration are common to all Southern States: In soil improvement, use of pure seed, preparation of the seed bed, cultivation, control of diseases and insects, livestock (including feeding, management,

and breeding), club work, home improvement, nutrition, clothing, and cooperative marketing.

The enrollment in home demonstration work showed a marked increase. More than 250,000 girls and women in the 12 States undertook different activities along home demonstration lines. There was also a marked tendency for each club member to undertake more and larger projects. In encouraging club members and demonstrators, county extension agents made 288,317 home visits and sent out millions of letters and circulars.

Working for the home not only stimulates cooperation in the family and between the agents, but it also encourages a friendly rivalry and a common sympathy among neighbors in the same community. The exchange of seed, bulbs, and flowers among the members of the local clubs was a manifestation of this fact. The cooperation of teachers and school officials in promoting home demonstration work continued most cordial.

As in previous years, boys' club work in 1923 continued to be a considerable part of the activities of the county agricultural agents. More and more it is recognized that the organized boys' club affords an effective means of teaching better practices, not only to the club member himself, but to his father as well. With this fact in mind the more progressive agents, in preparing their plans of work, kept in mind the part the boy has to play in putting on demonstrations.

COUNTY AGENT WORK

SOIL IMPROVEMENT

The conservation of fertility and the building up of soils is recognized as fundamental to a prosperous and successful agriculture. Thousands of gullied and abandoned hillsides are mute demonstrations of a lack of recognition of the fact that soils not properly handled will soon wear out. One of the first necessities for the maintenance of fertility is the prevention of erosion. Nearly 75 years ago a farmer in North Carolina developed a system of terracing, which largely controlled the flood waters and prevented them from washing away the surface soil. Unfortunately, his idea spread slowly and was not adopted to any appreciable extent by people outside of his locality until after the beginning of extension work through county agents some 50 years later.

The Mangum terrace is now used in all Southern States, and perhaps the most visible evidence of county agent work to the average traveler is the thousands of acres of well-terraced land throughout this region, where erosion is stopped, and the fertility of the soil is increased rather than decreased. The statement is often made that counties without agents may be picked out by the traveler because of the fact that no terraces are seen. In some of the counties where the work has been going on the longest, by far the greater percentage of the farms have been terraced. During 1923 extension agents reported 20,260 farms that terraced 660,969 acres for the prevention of soil erosion.

The agents continued to emphasize the care and use of farm manures, the application of lime, and a more intelligent use of commercial fertilizers. In 1923, 40,409 farmers were reported as taking better care of farm manures, and 13,859 farmers used lime or limestone on 113,950 acres. Coincident with the deflation of farm prices a few years ago, there was a material reduction in the use of commercial fertilizers. This resulted in decreased yields and in many instances meant the growing of cotton at a loss. It is now generally understood that an intelligent and more liberal use of commercial fertilizers is not only profitable but necessary for economic cotton production under boll-weevil conditions. With this general recognition on the part of farmers, there was a great demand on the agents for advice and assistance regarding the home mixing and cooperative purchasing of fertilizers.

In 1923, 108,906 farmers were reported as following the advice of extension agents in the use of fertilizers on 2,735,614 acres and 48,225 farmers were aided in home mixing 220,933 tons. More fertilizers were purchased cooperatively during 1923 than in any previous year, commodity-marketing associations serving as the business organizations through which such orders were handled. State pools were organized in a number of States for the purchase of nitrate of soda and acid phosphate. These State pools involved thousands of tons and several millions of dollars in investment. Such cooperative purchasing usually resulted in a saving of \$5 to \$10 per ton.

Although extension agents themselves did not perform the business transactions in connection with these activities, they were of much assistance in the general guidance of the movement and in furnishing advice regarding the kind of fertilizer that should be purchased.

CROPS

In 1923, for the first time in the history of extension work, there were more demonstrations with cotton than with corn. No doubt this was due to the good prices received for cotton, together with a united effort on the part of extension workers, experiment-station investigators, bankers, merchants, and all other business interests in making uniform recommendations for the production of cotton under boll-weevil conditions. Never before had so many interests united in recommending definite practices for the growing of cotton. All agencies working in the cotton territory recommended (1) the planting of cotton only in good, well-prepared land; (2) a liberal use of readily available commercial fertilizer before planting; (3) the use of pure seed of a recognized standard variety; (4) thick spacing of plants; (5) frequent shallow cultivation; and (6), where there is an infestation of the boll weevil, the use of calcium arsenate according to recommendations made by the Bureau of Entomology of the department. Farmers who follow these recommendations have a reasonable assurance of producing profitable crops under all except very adverse weather conditions.

In 1923 extension agents reported that 9,643 demonstrations of the practices recommended were conducted on 189,441 acres, resulting in an increased yield on the demonstrations of 314 pounds of seed cotton per acre. As a result of the extension work, 132,742 farmers changed their methods of cotton culture on 1,658,598 acres.

In corn, 7,507 demonstrations, totaling 88,251 acres, were carried on in 1923 with an average increase, due to better practices, of 14 bushels per acre. In some States the average yields of corn for the State as a whole were as much as 5 bushels per acre greater than ever known before the demonstration work was established.

The small grains—oats, wheat, rye, barley, and rice—although of secondary importance as compared with corn and cotton in the Southern States, are valuable crops. Extension agents reported 7,567 demonstrations on 144,361 acres, and 60,034 farmers changed their methods of small-grain culture in 1923.

In connection with crop demonstrations, the outstanding development was the increased interest in legume crops, alfalfa, soybeans, sweetclover, crimson and red clover, cowpeas, velvetbeans, peanuts, and lespedeza (fig. 18). In all, 29,388 demonstrations were conducted with these crops, involving 332,111 acres, and 121,010 farmers were influenced by extension work to adopt one or more of the better practices in legume growing on 928,010 acres. Soybeans, velvetbeans, lespedeza, and, in favored sections sweetclover, are crops that have found an important place in southern agriculture. The production of soybeans and lespedeza seed for the market is now important for many large sections that formerly depended primarily upon cotton.

Another outstanding development, particularly in the coastal-plain area, is the increased acreage now planted to pastures. Until recently farmers in this section depended almost entirely on the native range for pasture and did not believe that tame grasses could be grown successfully for this purpose. However, a limited number of demonstrations started a few years ago showed that, by preparing seed beds properly and selecting varieties of grasses suited to their conditions, as large a return per acre from tame pastures could be obtained as from most cultivated crops. Consequently, the acreage planted for pasture purposes is increasing. During 1923, 4,669 pasture demonstrations, involving 73,497 acres, were conducted. In one State during 1921, 1922, and 1923, 14,305 acres of new pastures have been planted and 40,216 acres of old pastures improved.

The minor crops, such as potatoes, sugarcane, sorghum, orchard and truck crops, also received attention from extension workers in 1923, both for home use and for marketing purposes.

There was continued development in 1923 in the production of better seeds. The value of good seed is now recognized by the majority of farmers. It is likewise recognized that every farmer can not be expected to be a seed breeder, any more than all livestock growers can be successful livestock breeders. Ac-

cordingly, efforts were directed toward the selection of individual farmers in each community to grow purebred seeds for sale to their neighbors. Community standardization of one variety of corn, cotton, or other crop is an outstanding piece of demonstration work that is being adopted by more of the States.

The planting and maintenance of forests in the South is recognized by the more progressive leaders as being one of the most important problems facing this area. Demonstrations of better practices in connection with forestry are beginning to be established, and it may be expected that from year to year there will be increased efforts along this line. During 1923 extension agents reported 262 forestry demonstrations on 13,385 acres. Only one of the Southern States employed a forestry specialist, but other States gave the matter serious thought and made plans to employ forestry specialists as soon as funds will permit.



FIG. 18.—Examining nodules on a soybean plant at a demonstration field meeting. Approximately 134,000 farmers in the 12 Southern States were reported as improving their methods of growing legumes and other forage crops in 1923

LIVESTOCK

The low prices which prevailed for all kinds of livestock, together with the relatively good prices received for cotton, naturally resulted in a lessening of the interest in livestock work, particularly the beef-cattle industry, during 1923. The dairy industry in general held its own, and in some cases made distinct progress. The same statement may be applied to swine, and the poultry industry showed unusual development. There have not been enough milk cows in the Southern States to provide milk and butter for the existing population, and continued emphasis was therefore placed on putting more milk cows on the small farms to provide dairy products for family use.

There was a noticeable change in the efforts of the livestock extension specialists. Formerly the main activities were directed primarily to procuring purebred animals, organizing cow-testing and bull associations, and general propaganda. Although it is recognized that purebred livestock is far superior to the scrub or grade animal, the placing of the more expensive purebred animals with people who had had only a limited experience in feeding and management often resulted in failure. There seems to be a general recognition of the fact that, although looking toward the increase of purebred animals is necessary

and of real value, the greatest improvement for many years to come is to be obtained through the teaching and adoption by the farmers of better feeding practices. The agents reported 16,489 adult demonstrations with dairy cattle, 737 with beef cattle, 653 with sheep, and 4,429 with swine. They also reported 75,529 farmers adopting better practices in connection with dairy cattle, 26,124 with beef cattle, 5,369 with sheep, and 54,685 with swine.

The poultry industry continued to make rapid development in 1923. Both the home demonstration and county agents have done much work with poultry, and the industry has developed to the point in many States where the car-lot shipment of fowls and eggs, unknown only a short time ago, is now a recognized practice. Commercial hatcheries have been established in nearly all sections, and the purchase of day-old chicks is common. The agents reported 55,351 demonstrations of poultry practices and 157,060 farms as adopting better practices as a result of extension work.

HOME DEMONSTRATION WORK

PRODUCTIVE ACTIVITIES

Home demonstration work started with girls demonstrating their tenth-acre gardens. Gardening and horticulture are still among the most popular projects in the Southern States. In 1923 home demonstration agents reported 59,245 demonstrations carried on by girls and 114,061 by women in these lines. There was a steady development in planting perennial gardens and permanent orchards, both of small fruits and the larger kinds. In many parts of the South, too, great interest was manifested in the production of berries and grapes, especially muscadine grapes. In the lower South the trend of permanent demonstrations was to figs, Satsuma oranges, and citrus fruits in general.

Many of the demonstrators built improved sanitary poultry houses, using designs furnished by the extension services of the colleges. All of them used purebred chickens and followed the best methods of feeding. Thousands of meetings were held where people were shown how to cull their chickens. Likewise much instruction was given in grading and packing eggs. As long as most of the Southern States do not produce as much poultry and poultry products as they consume, there will be excellent opportunities for better poultry farming.

As fast as the demonstrators succeed in making high-class butter, they get a premium for it. Those who make good cottage cheese usually sell it without any difficulty. Club girls and women living near large cities and big manufacturing districts find a ready sale for milk. The things, however, which have helped home dairying most have been the creameries and the health campaigns. The creameries stimulate production and the health campaigns impress upon the people the importance of drinking more milk.

FOODS AND NUTRITION

The enrollment in the work with foods and nutrition was so close to that in horticulture and gardening that it indicates a large amount of canning, preserving, drying, and other forms of conservation. Women and girls put up large quantities not only of vegetables and fruits but also of meats. Because of the low price of beef animals, thousands of cans of beef were put into the pantries for winter use and thousands were sold on the market. In one county alone women bought 300 steam-pressure canners. Women's clubs erected 14 clubhouses at which community canning was done. It was not an unusual thing for a small group to meet in the afternoon and can a whole beef. Of course most canning is done in the homes, but the clubhouse is one of the significant developments of home demonstration work. Women and girls like it for its social features and because it furnishes another opportunity for mutual helpfulness.

It is very encouraging to note that, through the initiative and resourcefulness of women, highly standardized combination products are put up. Because of their quality and variety, these articles do not conflict with commercial canneries. Perhaps the highest standards of quality have been reached in fruit packs and combinations.

In connection with the food and nutrition work, 15,310 demonstrations in bread making were carried on by women and 15,574 by girls in the 12 Southern

States. In meal preparation 12,681 women and 12,771 girls conducted demonstrations. In the school-lunch work 7,102 women and 9,208 girls took part, and other miscellaneous food demonstrations were conducted by 3,400 women and 4,806 girls.

The food-preservation work is highly significant also, as indicated by the number of persons conducting result demonstrations, as follows: In fruits, 31,624 women and 22,707 girls; in vegetables, 15,199 women and 12,166 girls; in meats, 6,958 women and 1,603 girls; and in miscellaneous food-preservation demonstrations, 1,287 women and 757 girls. As a result of extension work, 5,184,357 quarts of fruit, 4,625,888 quarts of vegetables, 7,046,495 pounds of meats, and 172,927 quarts of other food products were canned, dried, brined, cured, or otherwise preserved in 1923.

MARKETING HOME PRODUCTS

Home demonstration agents have done pioneer work in grading, packing, and marketing. The first canning itself was a matter of standardization, which assumed larger proportions when so many products were put up in glass. The same idea has also been applied to butter, cheese, and eggs, meats, and various handmade products, such as baskets, trays, mats, brooms, brushes, and other useful articles.

The agents have succeeded in getting the cooperation of business men, club women, and public institutions in finding good markets for these various products. The buying and selling is usually handled by the officers and members of the local clubs throughout the counties, but the agents give direction and guidance. In some places the federation of women's clubs becomes sponsor for the extension club and gives most valuable aid in the marketing work. A significant and interesting development is found in the club markets, of which more than 200 were in operation in 1923. These little markets are opened two or three days in the week. A vacant storeroom or garage serves as a place to assemble the products and do the selling until enough interest is aroused for the farmers and business men to erect a special building for the purpose. These markets are gradually developing upon a cafeteria-like basis. Some young woman, usually a club member, acts as cashier. The products to be sold are classified and standardized. The town and city women come to the market and make their own purchases. This is not the ordinary curb-market idea; it is a more recent and advanced development. The success of home demonstration workers in carrying it out is in itself a contribution toward solving the marketing question.

CLOTHING

Clothing work has developed materially. It started with having club girls make their own caps and aprons for use in club work and for the sake of neat and attractive appearance at public demonstrations; and it has gradually expanded until it includes the making of work dresses, house dresses, hats, and clothing in general. In 1923 women conducted 45,171 clothing and miscellaneous demonstrations, representing selection, renovation, construction, and remodeling. In the same lines of work, 54,514 demonstrations were conducted by girls, and 224,838 garments and hats, 14,051 dress forms, and 94,565 other articles of clothing were made. The materials used for these garments, hats, and other articles made by the girls' club members cost \$104,696, and the finished articles were valued at \$329,745, which indicates a profit of \$225,049, in addition to the experience and training received.

In addition to making clothing, club members gave much attention to making mats, rugs, table runners, window curtains, and other articles for household beautification, and furnishings involving textiles and fabrics. It is encouraging to note that the girls take an active interest in the beautification of the home as well as in clothing and millinery for the sake of their personal adornment. Where they have made demonstrations of their living rooms, bedrooms, and the home in general, the girls have been contented with the home and have worked more enthusiastically for the family influence in increasing the number of attractive homes in the neighborhood.

HOME ARRANGEMENT AND CONVENIENCES

One of the most vital and significant developments in the home demonstration field in the 12 States was in the kitchen-arrangement and equipment

demonstrations and campaigns (fig. 19). Extension agents reported that 9,337 adult demonstrations of this kind were made in 1923. This work assumed the proportions of a campaign in some States. Business men offered prizes of improved equipment and utensils, and the suggestive power of the whole movement was far-reaching. In counties where this work was conducted there was a disposition to carry the idea through the whole house. After the kitchen demonstrations, the program was divided into four units: (1) Bedroom, (2) living room, (3) dining room, (4) any one of the following: Hall, porch, den, kitchen, bathroom, or breakfast room. In some States these demonstrations have been planned through a series of years, and hundreds of demonstrators intend to follow through.

As a further proof of the effectiveness of demonstrations in and about the home, it should be noted that 19,090 pieces of furniture and furnishings were made or bought in the Southern States in 1923 as a result of the bedroom contest and living-room demonstrations. In 11,952 homes various kinds



FIG. 19.—Extension agent and farm women planning kitchen rearrangement. In 1923, approximately 365,900 demonstrations in the various home projects were conducted by rural women in the 12 Southern States with the assistance of extension workers. These lines of work included food selection, preparation, and preservation, making and remodeling clothing, feeding and care of children, introduction and use of home conveniences, household management, gardening, poultry keeping, interior decoration, and the improvement of home grounds, 1,199,750 women being reported as influenced to improve their practices in home making

of labor and time-saving devices and equipment were installed. These included washing machines, pressure cookers, fireless cookers, kitchen cabinets, vacuum cleaners, iceless refrigerators, and similar articles. Agents reported that 2,647 lighting systems, 347 heating systems, 1,854 water systems, and 786 sewage-disposal systems were installed in 1923; encouragingly large numbers in view of the financial conditions. The agents had 19,598 homes screened as demonstrations, which doubtless influenced thousands of other persons to screen their homes. Of course, some of these results were obtained with the cooperation of county agricultural agents, but they were principally obtained through the efforts of home-demonstration agents.

HOME PLANNING AND BEAUTIFICATION

In aiding the planning and construction of comfortable and attractive homes and the beautification of home grounds, home demonstration work reaches a culminating phase. During 1923, 1,090 homes were constructed and 1,670

were remodeled according to plans furnished by the agents. As a result, in some sections of the South the improvement in the architecture of the home and in its environment is becoming evident to the passer-by. Under the influence of home demonstration agents, girls and women interested in the work surrounded their homes with grass, shrubbery, trees, and flowers. A further evidence of the appeal of the beautification motive is found in the continuation and increase of demonstrations with flowers. They are grown for use in the homes, for making the grounds more attractive, and for market. Extension work demonstrated, also, that many kinds of flowers can be grown in other latitudes than where they are commonly raised.

BOYS' CLUB WORK

CROP CLUBS

The demonstration activities of club members reflected the economic conditions existing in the 12 Southern States in 1923. As in former years, corn demonstrations led the list. In 1923, 26,893 boys were enrolled in corn clubs, or approximately the same as in 1922. Of the number enrolled in 1923, 12,242 completed the required work. In cotton there were more than twice as many boys enrolled in 1923 as in 1922. Cotton demonstrations were started by 8,390 boys, of whom 4,203 completed the work outlined. Many of these demonstrations were outstanding, not only from the standpoint of club work, but in comparison with adult farmers. In several counties all cotton-club members averaged as much as a bale of cotton to the acre in spite of the damage from the boll weevil. It is interesting to note that club work has been the means of introducing better and purer varieties of cotton, corn, and other crops, as well as purebred livestock, into communities in a short period of time.

In addition to work with corn and cotton, boys' club members conducted demonstrations with wheat, oats, rye, barley, alfalfa, soybeans, sweetclover, crimson clover, cowpeas, velvetbeans, peanuts, and lespedeza. Considerable interest was also manifested by the boys in the production of potatoes and sweet potatoes. They conducted 2,297 demonstrations with potatoes and 2,656 with sweet potatoes. In a few States the value of using certified seed potatoes, as demonstrated by club members, resulted in adult growers planting certified seed, where previously they had been using either native-grown or miscellaneous northern-grown seed.

LIVESTOCK CLUBS

Livestock work was a popular club activity, pig-club demonstrations, as in previous years, being the most popular. Extension agents reported that 24,295 boys' pig-club members were enrolled in 1923, of whom 10,502 completed the work. This work continued to be conducted along three lines: (1) Growing and fattening pigs for market, (2) growing purebred pigs for breeding purposes, and (3) carrying on demonstrations with a sow and litter. Poultry work was next to swine in popularity, and 10,178 boys were enrolled in poultry clubs, with 4,373 completing. In some States the dairy-calf club became popular. Many boys purchased purebred calves and grew them into mature and valuable animals. These served as centers for the spread of purebred animals. In 1923, 1,894 boys were enrolled in dairy-cattle clubs, with 1,062 completing. Judging work was an important club activity, and was carried on in all Southern States, both with crops and with animals. Judging not only stimulates the interest of club members in better crops and animals, but develops the competitive spirit of clubs and communities. In many instances demonstration teams have been organized and trained that not only received much valuable information for themselves, but also served as an effective means for teaching other people what is or is not a good animal or a good practice.

EDUCATIONAL CAMPS

Rallies and camps continued to be important club activities. More camps were held in 1923 than ever before. Usually only club members who perform their work satisfactorily previous to the club encampment are permitted to attend. This serves as an incentive for the boy to continue his work in the face of many discouragements. The camps are conducted under the super-

vision of the State and county club leaders, and the activities are both educational and recreative. Some camps are for boys only, while others are for both boys and girls. Usually on one day of the camp the parents of the children are invited to attend and observe the work. These camps are anticipated by club members in the same manner as the city worker anticipates his summer vacation.

NEGRO WORK

Among negro farmers during 1923 there was a condition of unrest not experienced in many years. Owing to unfavorable weather conditions and boll-weevil damage, large areas failed to produce sufficient cotton even to pay for the cost of the fertilizer. This brought about an acute situation for large numbers of negro tenants and even landowners. Many thousands of families who grew no food supplies depended upon cotton to supply all needs, and when cotton failed they found themselves destitute. This condition, together with the high wages offered in industrial plants in the North and propaganda by negro leaders, resulted in several hundred thousand negroes migrating to the Northern States. This spirit of unrest still prevailed to a certain extent at the end of 1923, and, though fewer negroes were migrating, the movement



FIG. 20.—Remodeling a negro farm home. During 1923, approximately 57,600 demonstrations in improved crop and livestock production and 50,000 demonstrations in home making were carried out by negro farm men and women in the Southern States with the assistance of negro extension agents and cooperating white agents. There were also about 55,500 negro farm boys and girls enrolled in farm and home-making activities, the value of the products being \$938,074

still was of considerable magnitude. It is interesting to note that in those sections where the majority of the negroes owned their own homes, and where a larger percentage grew their own food and feed supplies, the migration was very much less than in those sections depending on cotton alone.

Such a condition as prevailed during 1923 added greatly to the duties and difficulties of negro extension agents, numbering 170 men and 106 women. Considering the primitive conditions of many of the people with whom the negro agents work, probably no class of agents in the extension organization renders a more effective service. The safe-farming program, mentioned elsewhere, is peculiarly applicable to the negro farmer. Accordingly, all negro agents have placed strong emphasis on the production of food crops. Thousands of negro farmers now have gardens, poultry, hogs, and, in numerous instances, dairy cows who a few years ago considered such things as luxuries and beyond the reach of the average farmer. (Fig. 20.) Where commodity-marketing associations have been organized the negro farmer has been invited to join and have an equal vote with the white members in the selection of officers. This has enabled many who join these associations to market their

products on grade and to receive the increased prices according to the quality of product grown. This was not the case under the old market system.

In most of the counties having negro agents, and particularly in those where the work has been carried on longest, negro organizations have been formed for the purpose of assisting the agents in outlining their programs and carrying on general extension work. These organizations have been unusually helpful in that they permit the agents to reach the maximum number of people.

Negro home demonstration work among the women and girls is extremely practical. Under existing conditions only the negro worker can go into the homes of these people and put on demonstrations in connection with better home making. The efforts of the 106 home demonstration agents in teaching food production, preservation, and preparation, poultry raising, health and sanitation, simple home beautification, and sewing and handicraft work are giving unusual returns for the money invested.

Home-makers' clubs for negro boys and girls make up a considerable part of the activities of all negro agents. The activities engaged in by these club members are along the same general lines as the work of the adults. There are numerous instances of outstanding accomplishments by individual members and clubs. In some States special State club leaders are employed, while in others the State county agent leader and the State home demonstration leader furnish the club leadership.

MISCELLANEOUS ACTIVITIES

Although demonstrations with crops, livestock, and better home making are fundamental in connection with all extension work, agents are called upon for numerous activities, the results of which are difficult to appraise but which require a considerable part of their time. The results of some of the activities of this nature are as follows: Farm visits made, 526,361; home visits made, 288,317; office calls, 1,221,118; individual letters written, 1,077,509; circular letters prepared, 28,325, with a total of 3,326,459 copies distributed; press articles written, 51,157; community buildings established, 579; rest rooms established for use of rural people, 361; fairs at which extension exhibits were made, 4,186; training meetings held for local leaders, 11,691, with an attendance of 194,657; demonstration meetings held, 128,822, with an attendance of 2,856,305; extension schools or short courses held, 2,209, with an attendance of 215,358; drainage systems installed, 3,214.

OUTLOOK

Extension work, as now organized in the 12 Southern States, has apparently found a definite and permanent place as a part of the educational system of these States. Although economic conditions prevailing during the past two years have made it difficult for the States to increase their appropriations materially, there have been few decreases, and the support on the part of county appropriating bodies has increased. These additional county appropriations, together with some administrative curtailment, have permitted the employment of more agents, and there was a steady growth in number during 1923.

In some of the States a number of counties have made appropriations, but there have not been available sufficient State and Federal funds to cooperate with the counties in the employment of agents. With a better system of marketing established and a successful means of combating the boll weevil available, it is felt that southern agriculture will come through the agricultural depression successfully, and no little of the credit for this success will be due to the persistent and tireless efforts of the more than 1,500 extension workers in the 12 States. Extension work is meeting a real need, and, while there may not be any large increase in the number of workers employed for the next few years, the outlook is favorable for a normal and steady growth, with a continued improvement in farm and home practices resulting in a more prosperous and contented country life.

EXTENSION WORK IN THE WESTERN STATES

W. A. Lloyd, Regional Agent in Charge

STATES: Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, and California.

The agricultural depression which had been developing since 1920 increased in severity in the 11 Western States during 1923 owing to low prices received for most western farm products and the high price level maintained for farm supplies. This condition, which was intensified by several total or partial crop failures in various localities, together with the necessity faced by appropriating bodies, was recognized by the extension divisions of agricultural colleges in the region, and in consequence they made conservative requests for funds, both local and State. Overhead costs of extension work were reduced wherever possible. In no case was any material increase in extension appropriations asked for or expected.

The total extension budget for the 11 Western States for 1923 was \$1,620,114.34, which was \$60,410.44 less than for 1922. The appropriations provided by the State legislatures decreased \$52,257.43. The grants by county commissioners decreased \$4,340.53, and the contributions from farmers toward the work decreased \$3,812.48. However, there were serious decreases in only three States, and in two States there were gratifying increases, in one of which the legislature voluntarily increased the amount requested by the college. In the remaining six States appropriations remained practically the same as those for the previous biennium. In the State legislature of each of these six States appropriations for extension were seriously questioned, and reductions were proposed that would have greatly crippled and in some cases completely stopped the work. The ability of extension work to withstand attack under such adverse conditions and to come through without serious loss is the result of a strong protest made by rural people against any action calculated to handicap the service.

ADMINISTRATION AND ORGANIZATION

A fundamental reorganization of extension administration is taking place in the 11 Western States. This is not the result of sudden impulse but is an adjustment to meet evolutionary changes within the organization. Most of the changes had already established themselves in practice; others were the result of the necessity of reducing administrative costs to the minimum.

Colorado was the first of the Western States to change from the project-leadership plan of organization to that of district supervision, with one person in charge of all lines of extension work for a group of counties, and responsible to the director. New Mexico, Washington, and Nevada during 1923 reorganized their forces on this basis. The fundamental character of the change that is taking place is evident from the combination of the county agent, home demonstration, and boys' and girls' club projects in 8 of the 11 States into a single project known as a county extension project, with one of the extension agents designated as administrative leader or county director.

STATE PROGRAMS OF WORK

The first attempt toward the development of State programs was the assembling of county programs and the making of specialists' plans and itineraries to advance them. This was an important step, because it brought a better working relationship between the State extension specialists and the county workers, and it has now become the universal practice in the 11 States.

The second step was the setting up of State goals for a few lines of work; first, for a single year, then for five to seven years. The greatest handicap in the development of State extension programs has been the lack of basic State agricultural programs, which are difficult of development even under settled agricultural conditions, and almost impossible under western conditions of new, untried, changing agriculture, shifting rural population, insufficient experimentation, and undeveloped resources.

Oregon was one of the first States to set itself seriously to the development of such a permanent agricultural program. This effort began two years ago with a joint attempt by the experiment station and the extension service to

outline a broad basis of permanent agriculture for the State. During 1923 extensive studies were carried on, agricultural facts were assembled and organized, and conferences were held with field workers. These studies culminated in the fall of 1923 in a state-wide fact organization and analysis conference, with more than 500 farmers representing every part of the State assembled and working in conjunction with representatives of commercial, manufacturing, railroad, and banking interests. Seventeen commodity committees were appointed and gave attention to applying the assembled and organized facts and working out the basis of a safe program in agricultural development. The work of this conference received the support of all the interests involved in its elaboration.

The last step in developing this program in Oregon is to take the State program to the counties where county-to-county fact-organization conferences are to be held. At these county conferences, with the help of all interests concerned in the commodities produced in the particular county, the facts will be analyzed and interpreted as the basis of production programs and extension projects. Heretofore emphasis has been principally directed toward the improvement of processes within the enterprise. These fact-organization conferences, while in no degree minimizing the importance of improved processes, are chiefly directed toward the determination of the enterprises and their extent. On such a basis as this it would seem possible to make a better selection of extension projects and to obtain a greater continuity of extension effort.

REGIONAL EXTENSION PROGRAM IN RANGE LIVESTOCK, DAIRYING, AND HUMAN NUTRITION

The development of agricultural programs produces an ever-widening horizon. When agricultural extension program building was first undertaken on a self-determined or community basis it was soon found that the community was not sufficient unto itself. As community programs broadened into county programs it was found that the county boundaries were only lines marking political subdivisions with no relation to agricultural areas. As the matter of program development was undertaken from a state-wide standpoint, two interesting aspects presented themselves: (1) There was a division of the State into agricultural areas along the lines of major crop or livestock enterprises, as the range cattle and sheep counties, the wheat counties, dairy, citrus, prune, raisin, potato, apple, and truck-crop counties; and (2) the State viewpoint itself was too narrow, as many enterprises were interstate and any effective extension effort called for concerted and articulated action between two or more States.

When, in 1922, an organized effort was begun to develop a western extension program, three projects were selected as a beginning: Range livestock management, dairying, and human nutrition. Committees were appointed at the agricultural colleges and in the U. S. Department of Agriculture. The facts were assembled, organized, and studied, and in November, 1923, the committees met with the directors of extension and the subject-matter workers from the colleges and the department of Fort Collins, Colo., and formulated a long-time regional program of extension in range livestock, dairying, and human nutrition for the Western States.⁷

This work is being carried on progressively. Standing committees with membership from the State extension divisions and from the Department of Agriculture were appointed for assembling data relative to crop production, with special reference to reenforcing the human nutrition, dairying, and livestock program. The program as recommended by the regional conference was taken to the States and submitted to the entire group of extension workers, who considered the phases most adaptable to their conditions and arranged recommendations to their county and community committees. Some part of the regional program was incorporated in every county extension program for 1924. The parts undertaken vary in the different States and in the counties within a State, but everyone is conscious that he is working toward and contributing to a common end. Already this has given to county workers a broader vision, to the subject-matter specialists a new perspective, and to the farmer cooperators increased confidence.

⁷ U. S. Dept. Agr. Circ. 308, An extension program in range livestock, dairying, and human nutrition for the Western States.

PERSONNEL

The total number of county extension workers employed in the 11 States on December 31, 1923, was 412. There were decreases in 5 States, increases in 2, the remaining 4 States having the same number as in 1922. The total number of county agricultural agents employed on December 31, 1923, was 329; the number of home demonstration agents, 63; and the number of club agents, 20. The number of State supervisors shows a net decrease of 10 or approximately 1 per State. There is now 1 State supervisor for 10 county extension agents.

Reorganization made possible the reduction of overhead supervision by 10 persons and decreased the supervision cost by \$65,706.72, at the same time increasing the efficiency of the extension work. The number of subject-matter extension specialists remained the same. There are 98 of these distributed as follows: Poultry, 11; dairy, 11; horticulture, 9; agronomy, 9; animal husbandry, 9; farm management, 8; clothing, 9; animal diseases, 7; marketing, 5; agricultural engineering, 5; entomology, 4; nutrition, 6; home management, 3; plant pathology, 2.

GENERAL STATUS OF RESULTS

The results of extension work in both agriculture and home economics showed a gratifying increase in the volume of work accomplished and improvement in the quality of work done. Particularly, home demonstration work in counties without resident home demonstration agents increased and was more esteemed than ever before. Extension agencies recognized more than ever that stabilized agriculture can not exist until there is a satisfying home environment, and the home projects of the agricultural agents are creating an increased demand for a larger home extension service. As farm business conditions improve this will undoubtedly find expression in an increase of State and county workers in this field.

FARM ACTIVITIES

In 1923, 5,607 communities were recognized for extension purposes in counties having the services of an extension worker. In 4,084 of these communities organized extension work was conducted. In more than 1,500 extension work was not organized, although these communities may have received assistance from the county agent in spite of their lack of organization. Of the 4,084 organized communities, 1,949, or 48 per cent, had projects involving farm crops as part of their extension program, 1,655 adopted the poultry project, and 1,521 the project for the control of predatory animals, rodents, insect pests, and the like. In other words, of the 5,607 communities, about one-third put forth effort to improve farm crops and more than one-fourth to improve their poultry enterprises.

The number of volunteer leaders assisting in crop extension work was 3,118 or more than for any other project; horticulture, poultry, and rodents pests having 1,901, 1,896, and 1,992 volunteer leaders, respectively. Each volunteer leader averaged two days' service. The increased benefit to the communities can readily be appreciated when it is realized that the aggregate of all this voluntary unpaid effort by farmer leaders is equal to the time of approximately 190 full-time county agents.

In the reports submitted to the department the days' work recorded for specialists and county agents included only those days which could be charged to definite project work and did not include miscellaneous calls and time devoted to special problems not coming within the scope of projects, which in many cases took up one-fourth to one-half of the agent's efforts. Extension agents devoted the most time to the agronomy project, 12,521 days in all.

The number of persons attending extension meetings is one measure of extension activity and indicates the degree to which extension ideas have reached the minds of the people. Extension meetings in poultry and horticulture had the largest attendance, in round numbers 89,700 and 88,000, respectively. Meetings connected with dairy enterprises were attended by 76,900 individuals, and crop meetings by 70,600.

TABLE 9.—Summary of farm activities in the 11 Western States, 1923

Project	Com- munities partici- pating	Voluntary leaders		Days special- ists helped	Days county agent worked in office and field	Attend- ance at meet- ings
		Number assist- ing	Days' assistance rendered			
Soils.....	471	470	610	530	1, 121	11, 624
Farm crops.....	1, 949	3, 118	5, 200	1, 638	11, 400	70, 624
Horticulture.....	1, 122	1, 901	2, 910	1, 244	7, 598	87, 983
Animal husbandry.....	1, 368	1, 771	4, 099	1, 451	6, 873	66, 659
Dairy husbandry.....	1, 268	1, 632	3, 998	1, 526	7, 257	76, 887
Poultry husbandry.....	1, 655	1, 896	3, 658	1, 246	5, 731	89, 713
Rural engineering.....	513	481	1, 130	476	1, 516	15, 120
Predatory animals, rodents, insect pests, and the like.....	1, 521	1, 992	4, 623	1, 305	4, 202	30, 003
Farm management and marketing.....	849	1, 130	2, 367	728	2, 722	42, 330

POULTRY

A study of extension activities relating to poultry indicates that extension agents recommended very definite and specific rations to meet the conditions in their respective States and that they worked out model poultry houses and provided poultrymen with plans and specifications for these houses. They also devised a simple method of culling which can be readily followed by farmers. These facts in a large measure determined the popularity of the project, which was also indicated by the attendance at meetings, the allotments of funds, and the willingness of the farmers to become local leaders and to devote their time to the spreading of improved poultry methods.

During 1923, 1,295 farmers completed poultry demonstrations, handling 535,531 fowls with a profit or saving of \$234,272. As a result of these activities, 19,346 farmers handled 3,310,438 fowls, according to plans advocated by the extension agents. As indicative of the kind of practice that can be encouraged through the extension organization, 10,749 of the 19,346 farmers adopting recommended poultry practices culled their flocks according to the methods advocated, 5,883 fed the poultry ration advocated, and 5,076 used recommended methods for controlling insect pests. Although the above facts would seem to indicate that undue effort was put into poultry work on the basis of the value of the enterprise, the extension organization, and the number of demonstrations, when the extension effort is measured in terms of the profit or saving to the farmers the work seems to have been justified. Assuming that the saving per bird for those who followed the practice advocated in the demonstrations was half of the saving reported on the demonstration flocks, it is estimated that the results of the poultry project brought to farmers a saving of between \$500,000 and \$600,000.

FARM CROPS

The relationship of one crop to another and of crops to livestock is probably going through a more rapid change than in any other part of the United States. This has resulted in the experiment stations and the extension workers having to aid the farmers with the introduction of new crops without sufficient research data or observations to enable them to proceed on the basis of a thorough test under varying local conditions. During recent years extending crops to new areas has also presented serious problems with reference to the adaptation of various crops to new soil, climatic, altitudinal, and economic conditions. As a result, a large part of the work with farm crops has consisted of demonstrations showing the advantage of the different crops in new areas, and contrasting demonstrations showing the adaptability of different varieties to different soils, climates, and altitudes. As soon as the crop has proved its worth and the variety best adapted to the locality has been determined, extension agents attempt to find a few farmers who will produce high-quality seed for sale to their neighbors. When there is sufficient demand for this new approved variety some means must be provided by the college and the State department of agriculture to see that the seed stocks are true to type and as represented. As a result various types of nonextension organizations have been built up to perform this service.

Cereals.—Reports indicate that 1,509 farm demonstrators carried on their corn enterprises on 22,439 acres according to instructions of extension agents, which influenced 7,394 farmers to follow similar practices in whole or in part on 116,637 acres. Of these 7,394 farmers, 4,096 planted selected or improved seed and 2,181 tested their seed for germination. With reference to wheat, 1,293 farm demonstrators followed similar advice on 70,110 acres, which was copied by 23,260 farmers on 715,493 acres. Of these farmers, 17,483 treated their seed grain for smut and 7,221 planted improved seed. Similarly, in connection with the oat demonstration work, the largest number treated their seed for smut and used the higher class of seed stock.

Legumes.—Practically every crop has some phase peculiar to its system of management that fits effectively into the system of extension teaching. Of the 4,902 farmers who adopted some of the practices advocated by the extension agents for alfalfa production, 2,505 used improved seed and 1,347 used some form of inoculation. Of the 2,201 who grew sweetclover the larger proportion of them used improved seed and inoculated. The above facts point out very clearly that farmers accept simple demonstrated processes to a much larger extent than those that are more complex and call for greater effort.

CROP PESTS

Often it takes the outbreak of a serious disease or the attack of some pest to bring about group action. Probably no pest causes such complete disaster in so short a time as the grasshoppers that periodically invade different areas (fig. 21). During 1923, 1,415 farmers cooperated with extension agents in clearing grasshoppers from 473,000 acres, with a saving to the farmer demonstrators of \$1,350,000, or an amount greater than the total cost of maintaining State county agent leaders and county agricultural agents in this region.

Since more than three times as much land was treated by other farmers, it is estimated that this one project saved enough to the 11 States to pay the entire cost of the extension service. In the grasshopper campaign, 13,314 farmers distributed 7,319,546 pounds of poisoned bait on 1,730,426 acres of land.

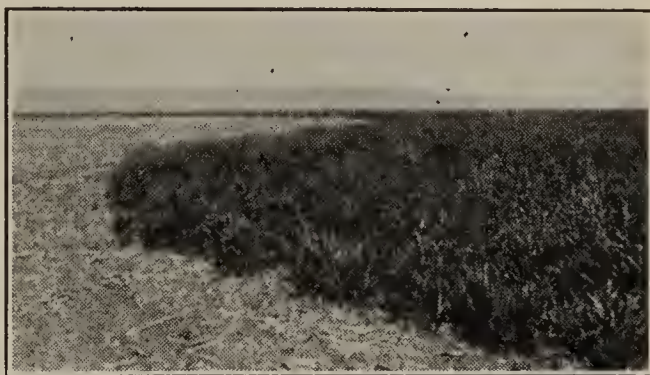


FIG. 21.—The frontier of a grasshopper invasion that was stopped by poisoning and burning. In 1923, 1,450 farmers in the 11 Western States cooperated with extension agents in demonstrating grasshopper eradication. A total of 473,000 acres was cleared of grasshoppers with a saving of approximately \$1,350,000. (Photograph furnished by Oregon Extension Service)

HORTICULTURE

A large part of the activities of the horticultural specialist relate to potatoes and tree fruits. More than 1,000 demonstrations were conducted with potatoes, resulting in 9,440 farmers growing 28,218 acres according to directions of extension workers. Of this number, 5,406 treated their seed, 3,613 used improved or certified seed, and 2,103 sprayed or dusted for diseases and pests. Of 23,191 farmers conducting their orchard operations according to suggestions of extension agents, 13,341 followed the system of pruning advocated by the extension service, and 13,589 used the system advocated for controlling diseases and pests. In connection with grapes, the principal practice adopted by the farmers was the method of pruning. Out of 5,348 following the instructions of the extension service, 3,792 used the system of pruning advocated.

DAIRYING

In 1923, 1,314 farmers conducted demonstrations with 30,538 dairy animals according to methods advocated by extension agents, with a total saving to the farmers of more than \$94,000. As a result of these activities, 41,595 farmers handled 385,124 animals in a similar manner. Of these 41,595 farmers, 31,182 had their animals tested for tuberculosis, and 5,181 used rations advocated by the extension service. There were 2,683 who were members of cow-testing associations, and 2,586 procured purebred bulls, 1,074 of whom pro-

cured this type of animal for the first time. The fact that dairy farming seemed to be more profitable than many other types of farming influenced the extension program for 1923 and the results obtained.

ANIMAL HUSBANDRY

Cattle and sheep occupy by far the more important place in the livestock industry but they did not receive relatively as much attention as farm crops, dairying and poultry, the practices connected with the enterprises were not so widely adopted, and the ranchmen did not act as voluntary leaders to the same extent. (Fig. 22.) Although the beef enterprise is between 75 and 100 per cent larger than the dairy enterprise, during 1923 only 281 adult demonstrations were conducted with beef cattle, involving 14,353 animals. However, better methods advocated by the extension service were put into practice on 217,292 beef animals by 6,633 stockmen. The one project most frequently adopted was the vaccination of beef cattle for blackleg. County agents re-



FIG. 22.—Cattle leaving the home ranch for the summer. During 1923 in the 11 Western States approximately 410 adult and junior demonstrations were conducted with beef cattle, involving 14,850 animals, and 2,400 with dairy cattle, involving 31,850 animals

ported that 4,637 stockmen used this method of disease prevention on 128,216 head. The next most important item was testing beef animals for tuberculosis. Only 71 completed demonstrations were conducted with sheep, and only 1,078 sheepmen changed their methods of management. Extension agents aided 202 ranchmen in treating 69,866 sheep for diseases, and 281 were assisted in procuring purebred rams to head their flocks.

The value of swine enterprises is about the same as that of poultry enterprises. However, nearly 1,300 demonstrations were conducted with poultry and only slightly over 500 demonstrations with swine. The profit or savings from poultry demonstrations was estimated at more than \$234,000, whereas the saving from swine demonstrations was estimated at less than \$10,000. During 1923, 6,238 farmers adopted some of the practices for swine management advocated by the extension service. Apparently, the principal items of interest to swine raisers were better rations for feeding their hogs, and better animals to head their herds. Of minor importance was the treatment of hogs to prevent cholera. The total saving as the result of the animal-husbandry project is estimated to be more than \$500,000.

FARM MANAGEMENT AND MARKETING

The extension activities previously mentioned dealt primarily with the improvement of the processes in connection with the various farm enterprises and with the idea of influencing the trend of these enterprises in the systems of farming. Farm management, on the other hand, takes into account the entire system of farming. During 1923, 1,113 farmers were aided in keeping accounts throughout the year, with the idea that on the basis of these records the extension workers, as well as the farmers, would obtain information that would enable them to advocate an improved system of farming. As a result of these records, 410 farmers changed their methods of carrying on their farm businesses. In addition, 1,167 farmers were influenced to adopt definite cropping and livestock systems, and 1,585 were aided in keeping cost-of-production records.

The extension service continued its interest in the establishment of more effective marketing agencies. Information was given as to methods of organization and conditions necessary to success. During 1923, 184 organizations with a membership of 13,290 were established by farmers to purchase farm supplies or to aid in the sale of farm products. By means of these organizations, approximately \$6,200,000 worth of products were handled, with a net saving to the farmer of more than \$825,000. Other previously established associations numbering 259 handled with 32,242 members approximately \$25,700,000 worth of products, with an approximate saving to farmers of \$2,825,000. In addition to these cooperative organizations, farmers and members of their household were assisted in buying and selling through other channels. The total sales and purchases amounted to more than \$950,000 with a saving of more than \$200,000 to those so assisted. County extension agents found that the commodity-marketing association is an effective cooperating agency for carrying on extension projects in standardization, grading, and quality improvement, as well as insuring economical production.

FACTORS DETERMINING EXTENSION PROGRAM

As was pointed out in connection with various enterprises, certain things are being accepted by farmers, and certain projects are receiving their cooperation through their voluntary activities to a greater extent than others. Apparently some of the reasons are as follows: In connection with agronomy, horticultural, poultry, and dairy projects, certain phases have been reduced to very specific and definite practices that the farmer can take home and put into his system of farming, and a contrast between the improved practice and the one usually followed is apparent. The simplicity to which the demonstration has been reduced, the directness of its application, and the visibility of its results seem to be the determining factors in the popularity of extension projects, and the popularity of the projects appears to determine the extension emphasis.

If, however, the tendency to put more extension funds and effort into those projects where it is easy to devise simple demonstrations continues, there is a possibility that these enterprises will be unduly stimulated and that ultimately an overproduction of these agricultural products will result. This suggests the necessity of bearing in mind that an important function of the extension service is to assist in working out a well-balanced system of agriculture and to put the extension emphasis on those projects that, in the long run, are the most profitable.

HOME ACTIVITIES

Home demonstration work grew and expanded largely through its own volition during 1923. The enthusiastic response and keen interest accorded by farm women throughout the West made great demands on the extension service. The number of communities and farm women reached increased 25 per cent over 1922 in the 62 counties in which county home demonstration agents were employed.

County agricultural agents were encouraged to assume increased responsibility in developing projects relating more directly to the interests of the farm home. As a result, 175 county agricultural agents, or 65 per cent, conducted an average of three home demonstration projects per county with an average of 28 result demonstrations in counties without home demonstration agents. In these counties an average of 103 women were influenced to put

into practice some of the improved methods demonstrated. The number of counties in which the county agricultural agents conducted home demonstration work follows: Arizona, 11; California, 12; Colorado, 16; Idaho, 34; Montana, 15; Nevada, 7; New Mexico, 17; Oregon, 15; Utah, 18; Washington, 20; Wyoming, 10. These figures include the counties in Arizona, Nevada, Idaho, and Utah supervised by district home demonstration agents covering from 3 to 10 counties each. The agricultural agents were able to accomplish such work because of the local leadership assumed by farm women and the assistance of the State specialists in home economics, who gave to each of the agricultural agents an average of 10 days' assistance during 1923.

ORGANIZATION AND METHODS

Home demonstration work was largely carried on in cooperation with existing community and county farm or women's organizations. It has been the purpose to develop a type of educational work that is sufficiently distinctive in plan and characteristic in methods for its identity to be maintained while it is functioning through various organizations. Though long distances make county organization of farm women difficult, progress was made in county-wide organized effort. In some cases the representation from the different community home demonstration groups was an integral part of the county farm organization, and in other cases it functioned as an advisory council which met with the county extension agents and assisted in making plans for activities of county-wide interest, studying and compiling community programs, and scheduling the visits of county extension agents and State specialists. The home demonstration projects in the community program were selected with consideration for the needs of the typical farm homes of the community, whether they fell within the scope of the extension service, and whether sufficient instruction and supervision could be obtained to assure the success of the project. Better results were usually obtained where the projects were limited to two or three in the community program.

An excellent example of the development of a community and county home demonstration program was reported by Santa Cruz County, a small mountain county on the coast of California. Home demonstration work in this county was conducted in 13 communities in 1923. In December, 1922, the women in each farm center or community met and talked over the program of work for 1923. A report of the discussions was given later at the farm-center meetings in the respective communities where the agricultural projects were also discussed. A vote was taken to decide which projects should be adopted. The home demonstration agent determined in advance of the meetings which projects were perhaps most needed in each center and outlined suggestive work which facilitated the discussions.

The plan of action and the results obtained in Mountain Center, Calif., are illustrative. It was decided that work be done in two main projects, clothing and nutrition, and also cooperation with the farmers on the "better garden" project. The plan of action outlined and some of the results follow:

Clothing.—(1) Have 10 per cent (about 6) of the women in the community make application of methods given in project. (2) Obtain one home demonstrator in construction and one in selection of clothing for health.

Nutrition.—Obtain four women to act as home demonstrators in food and selection, turning in three-day menus monthly and reporting at farm-center meetings.

As a result, 25 per cent of the families in the center came to know what makes up an adequate diet. The farm-center meetings at which the nutrition discussions took place were attended by 50 per cent of the people in the community. Twenty per cent of the homes reported that they were actually helped by the nutrition project.

The members of Mountain Center decided to make an actual demonstration of the value of nutrition work by making changes in the refreshments served at farm-center meetings and farm picnics. The interest in nutrition reached the children, and plans were made during 1923 to establish a hot school lunch beginning January 1, 1924. An agricultural extension tour was made, and a child belonging to one of the home demonstrators in nutrition was exhibited to show what can be accomplished through attention to food and health habits. One home demonstrator became a leader in the county in the use of the home evaporator. Four garden demonstrations were located. At least 10 per cent of the members made application of the methods of some part of the garden project.

At the county meeting the community programs were reviewed and a county program formulated. It consisted of those projects which were being carried on in the majority of communities in the county. After adoption, each project was written up in order to make sure that all persons understood clearly what was to be done, when it was to be done, and by whom it was to be done. The plan of writing up projects carefully was practically universal in California. Table 10 shows the Santa Cruz County home demonstration program for 1923, with the goals and the results:

TABLE 10.—*Home demonstration program for Santa Cruz County, Calif., 1923*

Project	Centers or communities adopting	Goal	Results
Farm home gardens-----	9	(1) Locate at least one demonstration in each center adopting project. Total, 9. (2) Have 10 per cent (approximately 40) of the people of the farm-centers adopting project put into practice methods given in project discussions.	(1) 30 demonstration gardens located. (2) 87 persons put into practice methods given at discussions.
Clothing-----	13	(1) Conduct 2 project-leader training meetings and 65 demonstrations of method. (2) Locate 2 demonstration homes in each center, 1 on selection and construction and 1 on selection of clothing for health. Total, 26. (3) Get 10 per cent of the farm women in the county (approximately 200) to make application of processes given in meeting the clothing problems of their families.	(1) 10 project-leader training meetings held with an attendance of 150. (2) 22 home demonstrations located in selecting clothing for health, 26 in selection and construction. (3) 206 women made application of processes given.
Food selection-----	5	(1) Locate 4 home demonstrations in each center. Total 20. (2) Have 25 per cent of the families in centers (approximately 100) practice an adequate diet.	(1) 29 demonstrations started or under way. (2) 120 homes adopted suggestions.
Child feeding-----	5	(1) Establish 5 adequate school lunches and make them permanent. (2) Obtain 25 home demonstrators. (3) Get 75 other mothers to feed their children correctly. Maintain health of normal children and bring to normal weight 50 per cent of those found either 7 per cent or more underweight, or 20 per cent or more overweight.	(1) 7 rural schools supplied the children with a hot lunch. (2) 84 home demonstrators were located. (3) 174 homes cooperated in the child-feeding and hot-lunch project.
Home management-----	5	(1) Locate 2 demonstration homes (total 10) in each center, 1 to try out a new piece of equipment and report upon its use, and 1 to study kitchen arrangement and make such rearrangement as may be necessary for greater convenience of work. (2) Have 10 per cent (approximately 20) of rest of women in centers adopting project make use of methods given.	(1) 34 home demonstrators obtained. (2) 38 women adopted suggestions.

LEADERSHIP

Ways and means of reaching a larger number of farm homes with the existing forces of extension agents were considered in all the Western States. The idea of stimulating local responsibility met with increased favor. In coun-

ties where home demonstration work has been in progress for several years leaders developed who were familiar with local situations and who assumed responsibility and gave assistance in furthering extension activities. In 1923 instructions in certain phases of the poultry, garden, food and nutrition, clothing, home-health, home-management, and community projects were given to 9,856 project leaders at training meetings conducted by State leaders, State specialists, and community home demonstration agents. Demonstration meetings were then held in the communities, where subject-matter information and technique was given either by the agent assisted by the project leader, or by the project leader alone. Follow-up meetings were held by the leaders, and home visits were made.

The report of Yakima County, Wash., is typical. In the spring of 1923, 26 leaders representing 20 communities attended the county training meeting for instructions in hat making. In the fall, meetings were held in two centers with an attendance of 24, representing 20 communities. All of these leaders reported, and 44 of the women they helped reached 67 others. This was the third season for this work, which has been so thorough and far-reaching that a sufficient number of women in 27 communities have learned the technique of hat making, and therefore practically no time of the county home demonstration agent had to be given to the project.

DEMONSTRATIONS

Projects are usually introduced into a county or community for the first time by means of demonstrations in a few homes or communities. Home demonstrators enroll and agree to try out certain methods of activities under the direction of the extension agent and to keep careful records and make full reports. Special effort was made to simplify these demonstrations and to concentrate on a few feasible practices to get the desired results and not to attempt too much in a given time. Also, closer supervision of demonstrations and more effective publicity were encouraged.

FOODS AND NUTRITION

The majority of all county extension programs carried projects relating to foods and nutrition. There was a greater realization of the necessity of correlating more closely the food and nutrition projects with such productive sources as the home garden and orchard, the family cow, and the home poultry flock. The following comments received from Nevada are in accordance with the above statement:

Home-garden demonstrations are being encouraged in Nevada. The results are promising, in spite of many difficulties involved in conducting home-garden work in a State like Nevada. It is evident that such work is worth while and means much in giving variety to the farm-home diet. We believe, if Nevada makes successful demonstrations of home-garden work, that almost any State in the West can do likewise. There is an increased interest in the production of home-grown foods as a needed dietary supplement and as a method of reducing the cost of living. Home-garden demonstrations were carried on in six counties. The results were thoroughly satisfactory. It is work that will be encouraged to a greater extent.

In many sections larger production and greater use of milk were encouraged. Intensive county "milk for health" campaigns were conducted in Arizona and Wyoming. Improved methods of making butter and cheese were taught to 587 farm women according to the reports of 45 extension agents.

The most outstanding report of poultry work supervised by a county home demonstration agent is from Platte County, Wyo. It is estimated that the poultry industry usually brings \$3,000 to Platte County farmers, whereas four years ago the farmer did not have enough to supply his own needs. Turkey raising is a growing industry in Platte County, largely because of the development of turkey clubs with the boys and girls. Three cars of dressed turkeys were shipped from the county in 1922 and seven in 1923.

The following food and nutrition projects are included in the extension programs: Food preservation, food selection and preparation, corrective feeding, child feeding and care, nutrition clinics, "keep growing" demonstrations, hot school lunch, foods for hot weather, milk campaigns, vegetable-cookery contests, and refreshments for community affairs.

The ultimate object or goal of nutrition work is to teach people who are reached by the extension program to know and practice right food habits, because physical and mental efficiency is based primarily upon a well-nourished

body. Through the results of the demonstrations in 1923, 18,361 home makers were influenced to adopt better practices in food selection and preparation, 11,628 adopted better practices in child feeding, and 15,004 adopted better methods in food preservation. Food preparation has been correlated with food selection in most of the nutrition programs. Most satisfactory results were realized generally in getting men, women, boys, and girls to add to their diets a sufficient amount of protective foods for health and growth in the form of fruits and green vegetables, milk and dairy products, eggs, and coarse-grain cereals.

Nutrition teaching has been woven into positive-health programs, in which the extension agents, health agencies, and teachers in the rural schools cooperated. Thirty-nine extension agents cooperated in establishment of 307 hot school lunches in rural schools involving at least 7,000 children. The human-nutrition program as adopted by the Western States Extension Conference at Fort Collins, Colo., in 1923 gave added stimulus to the development of projects relating to foods and nutrition.

HOME IMPROVEMENT AND MANAGEMENT

All efforts in agricultural and home-economics extension work are directed toward making a prosperous, happy, and contented farm life. Activities which make for efficiency, comfort, and attractiveness in the farm home itself had an important place in the extension programs in 1923. The principal phases of this project related to kitchen arrangement, labor-saving equipment, inexpensive and attractive refurnishing and decorating, house planning and remodeling, beautification of home grounds, installation of septic tanks, water and lighting systems, household accounts and budgets, time and labor schedules, and improved laundry methods.

In 1923 extension agents in six States gave assistance in the planning and rearrangement of farm kitchens for convenience and efficiency, and as a result 49 extension agents reported 402 kitchens improved and rearranged for the saving of time and energy. Kitchen contests were conducted in two counties in Wyoming. Kitchens of the contestants were scored by extension specialists and agents and suggestions were given for improvement involving little expense. Interest and enthusiasm were aroused and resourcefulness on the part of the women developed. When the 43 kitchens were rescored it was found that the first-prize kitchen in Platte County was in a 2-room house on a dry-land farm. As a result of the improvement made, three hours less per day were spent in this kitchen. The average cost of improvements per kitchen in Platte County was \$5.57, and in Sheridan County \$10.29. A tour was held in Platte County, and 30 men and women visited four of the improved kitchens.

Women and girls are appreciative of information and suggestions about making the home more restful and attractive with a minimum expenditure of money. The refinishing of old furniture, inexpensive and harmonizing decoration, and proper arrangement improved the interiors of homes in which women and girls conducted room demonstrations. This work had a far-reaching effect. In California 86 communities in 10 counties reported that 1,506 homes were reached by some phase of the home-furnishing project. The project was started in San Diego County in 1921, and 594 homes in the county have been made more attractive and comfortable since that time.

An attractive interior acts as an incentive to beautify the outside of the home as well. In 1923, 1,372 home grounds were improved according to plans and suggestions furnished by 49 extension agents. Interest in good plans for suitable types of farm houses was shown by the increased demand made upon the extension service for such information. This afforded an opportunity for service which had a permanent and lasting effect. In Washington 18 houses were constructed and 30 remodeled in accordance with plans furnished by the extension service. After a house was finished demonstration meetings were held, and the agents assisted others desiring to adapt to their own needs the ideas incorporated in the demonstration houses. The objective was to have at least one demonstration house in each county.

CLOTHING

The clothing project continued to be in great demand. Local leaders functioned effectively in making it possible for some phases of the clothing project to be conducted in counties without home demonstration agents. In 1923, 100

extension agents reported 7,844 demonstrations in clothing by women and 5,233 by club girls. Adult and junior extension work influenced women in 39,135 farm homes to improve practices in clothing.

The phases of the clothing project reported are as follows: Plain garment construction, clothing selection, renovating and remodeling, hat making, dress forms and their proper use, alteration of patterns, foundation patterns, clothing for children, use of sewing-machine attachments, decorative and tailor finishings, dyeing, proper corsetry, health shoes, and sewing furs. As many women and girls purchase ready-made garments and hats, in clothing selection better buying was taught with reference to qualities for durability, suitability, design, and price. In hat making only simple processes were taught, the renovating of hats and materials, and the use of materials on hand. Proper selection was emphasized, as well as points to consider in buying becoming and appropriate hats. Clothing items of interest were reported by two States. In 28 counties of Washington, 7,944 families were reported influenced by extension work to improve practices relative to clothing. By following the practices recommended, these families saved approximately \$73,599.05, which does not include any value placed on service. In Colorado, clothing work done in girls' clubs was outstanding, 1,800 girls enrolling and 1,143 completing the work. At least 2,233 homes were influenced to adopt better practices.

HOME HEALTH AND SANITATION

Home health and sanitation were emphasized in connection with other projects. They were sometimes taught in cooperation with various health agencies and organizations. Instruction in home nursing was given to 2,704 homes, according to the reports of 34 extension agents. Fifty-eight agents reported that 4,057 home makers were influenced by the extension service to adopt better sanitary practices. Home-health work was conducted in 118 communities in 20 counties in Utah.

CAMPS FOR FARM WOMEN

A few States held county training camps for leaders. The purposes of the camps were: (1) To provide a satisfactory and pleasant three or four days' vacation for the project leaders selected from each community to take part in the camp program, and (2) to provide an opportunity for training community leaders. In the summer of 1922 two such camps were held in Montana. In 1923 five camps were held, attended by 224 community leaders.

RADIO

A new activity in the Oregon home demonstration program was the broadcasting done by home demonstration workers. One of the three strong radio stations on the Pacific coast was used for this purpose. A series of talks on food preservation was broadcasted throughout the summer, followed by a series of four nutrition talks, a series of seven talks on home-management topics, another unit (six talks) of the nutrition series, and a series of talks on clothing. The extension service had no way of knowing just how many people listened in, but they received most interesting reactions from the farm folks when the field workers visited the counties.

FARM-HOME SURVEYS

In Utah the State agricultural and home demonstration leaders and the State specialists began survey work in the counties to determine actual conditions on farms and in homes. Committee sessions with extension agents and representative men and women of the communities in the counties were held to review the conditions and to work out programs which were to include methods of establishing practices to improve conditions.

Four county home demonstration agents of Oregon made a kitchen survey of 258 homes in their counties to learn the exact conditions of kitchens and the equipment connected with the kitchen and the work of the farm home. In addition to the interesting and valuable information obtained, the survey afforded an opportunity for closer contact in many farm homes, and the agents learned better the needs, wants, ambitions, and, sometimes, the indifference of farm women.

The most extensive farm-home survey in the West during 1923 was made in Montana, where 200 homes were surveyed, equally divided between irrigated and dry-land districts. It was found that 84 per cent of the homes visited were owned, 16 per cent were rented, 12.5 per cent had no children, 31 per cent had refrigerators, 44 per cent had hand-power washing machines, 14 per cent had motor-power washing machines, 42 per cent had no washing machines, of which 4 per cent sent out their laundry, 11 per cent had gas or electric lights, 18 per cent had water piped into their homes, 10 per cent had indoor toilets, and 57 per cent had floors covered with linoleum.

PROGRESS

A greater number of extension activities closely related to the home were conducted than in any previous year, and more and greater demands were made upon the extension service by the farm women. Not only was there a greater volume of work accomplished, but quality and standards were improved commensurately. Home demonstration projects were conducted in 260 counties, resulting in at least 15,349 definite demonstrations being made by farm women, 8,156 by girls, and 343 by boys, in nutrition, clothing, home improvement and management, and home health, not including demonstrations in gardening, poultry, and home dairying. The final and largest measurement is that 95,486 home makers were influenced to apply in practice the improved methods demonstrated.

JUNIOR ACTIVITIES

Junior extension work made decided progress in expansion over a larger territory and in the development of a more constructive and permanent program. (Fig. 23.) Organized work was conducted by 233 extension agents, 21 county club agents, 36 home demonstration agents, and 176 county agricultural agents. Some work was done in 41 counties without extension agents, the work being supervised by voluntary local leaders. The total enrollment of different boys and girls was 25,549 (10,801 boys and 14,748 girls) with 65 per cent of those enrolled completing and reporting the required work. The total enrollment by club activities is shown in Table 11.



FIG. 23.—Agricultural club member receiving her chicks. Improved methods of selection, feeding, housing, and management of poultry were practiced by the 2,367 boys and girls in the 11 Western States enrolled in poultry clubs, of whom 65 per cent completed the required work. (Photograph furnished by the California Extension Service)

TABLE 11.—Enrollment in boys' and girls' club activities, Western States, 1923

Activity	Enrollment	Percentage completing	Counties reporting	Activity	Enrollment	Percentage completing	Counties reporting
Corn.....	1, 174	69	64	Swine.....	2, 982	73	132
Potatoes.....	522	68	50	Poultry.....	2, 367	65	106
Fruit.....	200	78	4	Farm accounts.....	196	68	12
Market gardening..	428	61	15	Feed preparation..	2, 708	66	35
Vegetable gardening	1, 268	62	50	Food preservation..	2, 235	50	58
Forestry.....	51	15	2	Clothing.....	8, 539	61	111
Horses.....	31	74	3	Home management			
Dairy cattle.....	1, 420	76	99	and furnishing....	181	63	9
Beef cattle.....	190	68	29	Miscellaneous.....	324	72	12
Sheep.....	263	74	35				

SUPERVISION

In eight States separate boys' and girls' club leadership was discontinued, and the supervisory functions of the former State club leaders were assumed by the county agent and home demonstration leaders, or the district leaders

and assistant directors that superseded these officers. In three of these States a club-method specialist was retained. The immediate effect of this change was increased interest in boys' and girls' club work by county agents and home demonstration agents. Club work is now recognized as a definite part of the work of these agents and the appreciation of club work, or junior extension, as one of the important teaching agencies of extension service has been much strengthened. Although the volume of club work temporarily decreased in 1923 owing to the discontinuance of the special agents, the work spread over a larger territory, and more people were brought in contact with it.

PROGRESS

The outlook for club work is promising. In Montana 86.5 per cent of the 310 community extension programs carried club activities. Junior demonstrations not only supplemented the major agricultural and home activities in the extension program, but aroused interest and brought improved practices before the community in an effective manner.

The junior demonstration has sometimes aroused the first interest in counties without extension agents, leading to extension activities for adults. Club work was conducted in 20 such counties in Colorado in 1923 by local leaders, assisted by the State leader, district agent, and specialists. Instances were reported by Arizona and New Mexico where the demonstrations by the club members stimulated organization for home demonstration work.

Both agricultural and home-economics specialists gave more time to club work in preparing publications, training leaders, visiting demonstrations, training demonstration and judging teams, assisting in encampments, tours, and exhibits. This help improved the quality of work done, making the demonstrations more valuable to the club members and their influence more effective. Valuable assistance in club work was given by 2,641 local leaders.

Constructive club programs were developed, and some clubs organized with plans for a three or four year program. Interest on the part of club boys and girls can be measured somewhat by the members who continue from year to year. The enrollment listed by years follows: First year, 8,532; second year, 3,569; third year, 1,514; and fourth year, 635. Fifty-eight county extension agents reported that 185 club boys and girls entered college during 1923 as a result of ambitions aroused, and by means of the profits from productive club activities.

All States held a larger number of encampments and achievement days. In the 11 States 228 such meetings were held, with an attendance of 9,101 club members. These meetings stimulated more and better work and brought up the percentage of reports received. There were 792 demonstration teams (315 boys and 477 girls) and 303 judging teams trained, which gave public demonstrations at county, State, and interstate fairs, club encampments, the two large western stock shows, and at the national club congress.

Colorado reported that two of her canning-club girls demonstrated in France under the auspices of the American Committee for Devastated France. These girls had done excellent club work for four years. They won second place in the national contest at the International Livestock Exposition, which entitled them to the trip to France.

SUMMARY

Extension work made gratifying progress in the 11 Western States in 1923.

Although there was no increase in the number of farm and home demonstrations, a better quality of work was done, as shown by the increase in the number of improved farm and home practices adopted. The number adopting improved farm practices increased from 241,985 to 325,433. The number adopting improved home practices increased from 42,183 to 95,486.⁸

The number of counties reached by boys' and girls' club work increased. Seventy per cent of the county extension agents worked with young people.

Overhead supervision was reduced, and \$50,000 was saved in overhead expense.

Plans of work for county extension agents and State specialists were made more specific, itineraries of travel were better adhered to, and better teamwork was obtained.

⁸ Data for 1923 include all demonstrators as well as practices adopted as a result of club activities which were not so reported in 1922.

More definite goals of accomplishment were set and a larger percentage of accomplishment was obtained.

State and county fact-organization committees were appointed and fact-study conferences held, through which the broad extension basis of sound agricultural and home-economics policy is being established and extension programs developed.

A regional program of work in range livestock, dairying, and human nutrition was adopted in joint conference between representatives of the various bureaus of the U. S. Department of Agriculture and representatives of western agricultural colleges.

The extension forces were organized, the trail blazed, and the goal set for a complete, permanent extension program in agriculture and home economics for the 11 Western States that link together the extension forces of the State and nation in sympathetic and understanding unity with the farm people; that insures unity of purpose and unity of action; that, forgetful of county and State boundaries, puts the big force behind the big job which obtains that articulation of forces and reenforcement of effort that brings the largest success.

STATISTICS

TABLE 12.—*Statistical summary of cooperative extension work, 1923*

[Funds for extension work are appropriated for fiscal years ending on June 30, whereas extension agents are required to prepare their reports for calendar years. For this reason, the statements of funds expended are for the fiscal year ended June 30, 1923, and the statistics of results of work done are for the calendar year ended December 31, 1923]

Project or line of work	Reported by county agents		Reported by home demonstration agents		Reported by club agents ¹		Total	
	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number
Communities in counties.....	2, 227	41, 939	919	24, 380	129	3, 758	3, 275	70, 077
Communities with extension program.....	1, 873	23, 213	772	13, 377	117	2, 708	2, 762	39, 298
Voluntary local leaders:								
Adult.....	2, 087	102, 814	835	36, 066	27	1, 534	2, 949	140, 414
Junior.....	1, 549	22, 257	627	13, 971	128	5, 708	2, 304	41, 936
Membership in county extension organizations and adult clubs.....	1, 602	737, 305	788	268, 909	67	27, 818	2, 457	1, 034, 032
Junior clubs.....	1, 805	16, 556	768	10, 350	134	5, 767	2, 707	32, 673
Enrollment—								
Boys.....	1, 831	151, 729	200	8, 518	131	27, 030	2, 162	187, 277
Girls.....	1, 325	79, 473	781	154, 208	135	38, 116	2, 241	271, 797
Completions—								
Boys.....	1, 576	76, 390	146	4, 265	127	18, 567	1, 849	99, 222
Girls.....	1, 120	44, 571	666	78, 557	130	27, 066	1, 916	150, 194
Farm visits made.....	2, 238	1, 200, 181	180	38, 481	119	42, 374	2, 537	1, 281, 036
Different farms visited.....	2, 090	569, 698	176	18, 053	108	22, 136	2, 374	609, 887
Home visits made.....	953	163, 084	906	234, 372	95	22, 575	1, 954	420, 031
Different homes visited.....	928	89, 683	880	120, 623	86	11, 826	1, 894	222, 132
Office calls.....	2, 216	3, 374, 761	907	550, 137	121	55, 010	3, 244	3, 979, 908
Percentage of time in field.....	2, 234	66	919	69	131	64	3, 284	67
Percentage of time in office.....	2, 237	34	919	31	131	36	3, 287	33
Individual letters written.....	2, 232	2, 677, 577	917	655, 185	131	112, 118	3, 280	3, 444, 880
Demonstration meetings.....	2, 019	110, 191	820	123, 614	120	11, 422	2, 959	245, 227
Attendance at demonstration meetings.....	2, 023	2, 720, 660	799	2, 376, 721	120	201, 063	2, 942	5, 298, 444
Number of all meetings.....	2, 019	235, 020	820	161, 348	120	24, 369	2, 959	420, 737
Attendance.....	2, 023	10, 868, 483	799	4, 399, 750	120	749, 538	2, 942	16, 017, 771
Meetings at which lantern slides were shown.....	670	4, 055	166	768	59	495	895	5, 318
Meetings at which motion pictures were shown.....	1, 132	16, 851	303	2, 320	46	379	1, 481	19, 550
Soils:								
Adult demonstrations.....	1, 466	34, 502	1	10	4	38	1, 471	34, 550
Farms following advice in use of commercial fertilizer.....	1, 518	169, 618	2	125	4	316	1, 524	170, 059
Farms using lime and limestone on advice.....	1, 280	63, 702	-----	-----	1	17	1, 281	63, 719

Farms taking better care of farm manure.....	1, 092	60, 225	-----	-----	2	518	1, 094	60, 743
Farms plowing under green-manure crops.....	1, 368	57, 165	-----	10	3	254	1, 372	57, 429
Different farms adopting better practices.....	1, 971	322, 065	-----	125	7	819	1, 980	323, 009
Corn:								
Adult demonstrations.....	1, 308	13, 145	-----	2	2	6	1, 311	13, 153
Junior ² demonstrations.....	858	16, 870	-----	13	42	410	901	17, 293
Farms planting selected seed.....	1, 432	112, 301	-----	15	17	245	1, 450	112, 561
Farms testing seed for germination.....	849	39, 024	-----	-----	14	161	863	39, 185
Different farms adopting better practices.....	1, 759	170, 549	-----	78	28	453	1, 789	171, 080
Wheat:								
Adult demonstrations.....	790	8, 013	-----	-----	3	12	793	8, 025
Junior ² demonstrations.....	44	272	-----	-----	1	7	45	279
Farms planting selected seed.....	877	52, 862	-----	-----	3	47	880	52, 909
Farms treating seed for smut.....	559	35, 909	-----	-----	3	1, 534	562	37, 443
Different farms adopting better practices.....	1, 222	92, 721	-----	-----	5	1, 584	1, 227	94, 305
Oats:								
Adult demonstrations.....	720	5, 276	-----	-----	2	19	722	5, 295
Junior ² demonstrations.....	42	219	-----	-----	-----	42	5	219
Farms planting selected seed.....	787	30, 531	-----	-----	-----	787	516	30, 531
Farms treating seed for smut.....	596	40, 455	-----	-----	1	20	597	40, 475
Different farms adopting better practices.....	1, 210	74, 223	-----	-----	2	202	1, 212	74, 425
Rye:								
Adult demonstrations.....	283	2, 106	-----	-----	1	12	284	2, 118
Junior ² demonstrations.....	5	26	-----	-----	-----	5	5	26
Different farms adopting better practices.....	514	12, 019	-----	-----	2	201	516	12, 220
Barley:								
Adult demonstrations.....	260	1, 216	-----	-----	3	19	263	1, 235
Junior ² demonstrations.....	20	40	-----	-----	-----	20	40	40
Different farms adopting better practices.....	463	7, 978	-----	-----	3	211	466	8, 189
Other cereals:								
Adult demonstrations.....	216	1, 459	-----	-----	1	1	217	1, 460
Junior ² demonstrations.....	85	1, 008	-----	80	3	16	89	1, 104
Different farms adopting better practices.....	336	14, 310	-----	217	3	63	340	14, 590
Alfalfa:								
Adult demonstrations.....	986	10, 331	-----	-----	2	23	988	10, 354
Junior ² demonstrations.....	12	52	-----	-----	-----	12	52	52
Farms planting selected seed.....	821	27, 185	-----	-----	1	11	822	27, 196
Farms inoculating for this crop.....	941	33, 359	-----	1	2	11	944	33, 371
Different farms adopting better practices.....	1, 424	56, 130	-----	4	2	221	1, 427	56, 355
Soybeans:								
Adult demonstrations.....	1, 064	14, 901	-----	7	2	6	1, 067	14, 914
Junior ² demonstrations.....	62	632	-----	-----	1	6	63	638
Farms planting selected seed.....	813	33, 445	-----	7	1	3	815	33, 455
Farms inoculating for this crop.....	793	37, 764	-----	-----	1	1	794	37, 765
Different farms adopting better practices.....	1, 360	79, 802	-----	10	2	12	1, 363	79, 824
Sweetclover:								
Adult demonstrations.....	684	7, 059	-----	-----	2	31	686	7, 090
Junior ² demonstrations.....	4	27	-----	-----	-----	4	4	27
Farms planting selected seed.....	463	12, 300	-----	-----	-----	463	463	12, 300
Farms inoculating for this crop.....	543	11, 147	-----	-----	1	2	544	11, 149
Different farms adopting better practices.....	1, 078	30, 014	-----	-----	2	109	1, 080	30, 123

¹ Includes a small amount of work in counties without extension agents, reported by State club leaders.

² Boys' and girls' club members.

TABLE 12.—*Statistical summary of results of cooperative extension work, 1923—Continued*

Project or line of work	Reported by county agents		Reported by home demonstration agents		Reported by club agents		Total	
	Agents report-ing	Number	Agents report-ing	Number	Agents report-ing	Number	Agents report-ing	Number
Crimson clover:								
Adult demonstrations.....	232	2, 187	---	---	1	40	233	2, 227
Junior 1 demonstrations.....	3	13	---	---	---	---	3	13
Different farms adopting better practices.....	343	9, 659	---	---	1	50	344	9, 709
Clover (red, alsike, white):								
Adult demonstrations.....	362	3, 421	---	---	2	11	364	3, 432
Junior 1 demonstrations.....	2	3	---	---	---	---	2	3
Farms planting selected seed.....	248	17, 230	---	---	1	10	249	17, 240
Different farms adopting better practices.....	601	30, 843	---	---	2	17	603	30, 860
Cowpeas:								
Adult demonstrations.....	553	7, 116	---	---	1	1	554	7, 117
Junior 1 demonstrations.....	40	586	---	---	---	---	40	586
Farms planting selected seed.....	290	7, 157	---	---	---	---	290	7, 157
Different farms adopting better practices.....	679	24, 598	---	---	1	1	680	24, 599
Velvetbeans:								
Adult demonstrations.....	294	4, 110	---	---	---	---	294	4, 110
Junior 1 demonstrations.....	23	409	---	---	---	---	23	409
Different farms adopting better practices.....	344	16, 597	---	---	---	---	344	16, 597
Field beans:								
Adult demonstrations.....	137	986	---	---	---	---	137	986
Junior 1 demonstrations.....	20	336	1	4	7	56	28	396
Different farms adopting better practices.....	190	5, 328	---	---	4	21	194	5, 349
Peanuts:								
Adult demonstrations.....	258	3, 162	---	---	---	---	258	3, 162
Junior 1 demonstrations.....	195	2, 047	1	1	---	---	196	2, 048
Different farms adopting better practices.....	335	15, 245	---	---	---	---	335	15, 245
Lespedeza:								
Adult demonstrations.....	285	3, 144	---	---	---	---	285	3, 144
Junior 1 demonstrations.....	6	54	---	---	---	---	6	54
Different farms adopting better practices.....	338	10, 407	---	---	---	---	338	10, 407
Pastures:								
Adult demonstrations.....	656	6, 729	1	2	1	6	658	6, 737
Different farms adopting better practices.....	835	19, 182	1	2	2	21	838	19, 205
Other legumes and forage crops:								
Adult demonstrations.....	299	2, 988	---	---	---	---	299	2, 988
Junior 1 demonstrations.....	13	99	---	---	---	---	13	99
Different farms adopting better practices.....	400	14, 472	---	---	---	---	400	14, 472

TABLE 12.—Statistical summary of results of cooperative extension work, 1923—Continued

Project or line of work	Reported by county agents		Reported by home demonstration agents		Reported by club agents		Total	
	Agents reporting	Number	Agents reporting	Number	Agents reporting	Number	Agents reporting	Number
Market gardening:								
Adult demonstrations.....	355	3,770	188	10,545	1	5	544	14,320
Junior 1 demonstrations.....	48	714	197	9,474	13	221	258	10,409
Farms planting selected seed.....	260	7,405	3	139	7	82	270	7,626
Farms spraying or dusting for diseases and insects.....	286	9,171	116	4,398	2	10	404	13,579
Different farms adopting better practices.....	557	23,286	286	23,730	10	212	853	47,228
Home gardens:								
Adult demonstrations.....	272	5,214	319	32,492	2	19	593	37,725
Junior 1 demonstrations.....	101	2,702	317	18,091	69	6,030	487	26,823
Homes planting selected seed.....	193	11,534	6	327	8	373	207	12,234
Homes spraying or dusting for diseases and insects.....	269	9,717	216	14,111	9	720	494	24,548
Different homes adopting better practices.....	505	28,890	441	57,577	32	2,689	978	89,156
Beautifying home grounds:								
Adult demonstrations.....	241	1,684	252	18,291	2	28	495	20,003
Junior 1 demonstrations.....	13	465	214	15,353	6	312	233	16,130
Different homes adopting better practices.....	419	9,022	370	38,244	4	150	793	47,416
Forestry:								
Adult demonstrations.....	205	1,415	1	4	1	3	207	1,422
Junior 1 demonstrations.....	3	35			2	8	5	43
Forest and wood-lot plantings made.....	114	1,873			2	5	116	1,878
Farms planting windbreaks.....	180	902			1	2	181	904
Different farms adopting better practices.....	382	4,592	1	12	5	31	388	4,635
Horses and mules:								
Adult demonstrations.....	82	531					82	531
Junior 1 demonstrations.....	16	109			1	10	17	119
Different farms adopting better practices.....	413	13,814			1	1	414	13,815
Dairy cattle:								
Adult demonstrations.....	710	7,897	219	13,206	1	4	930	21,107
Junior 1 demonstrations.....	490	6,015	104	2,215	102	2,243	696	10,473
Farms assisted in procuring purebred sires.....	1,317	12,143			37	140	1,354	12,283
Farms assisted in procuring purebred females.....	1,066	8,757			51	479	1,117	9,236
Farms culling herds.....	565	10,725			15	172	580	10,897
Bull associations organized during year.....	213	400			5	7	218	407
Members of bull associations.....	222	6,928			7	69	229	6,997
Cow-testing associations organized or reorganized during year.....	486	7,707			2	3	488	710
Members in cow-testing associations.....	495	16,501			2	51	497	16,552
Other farms testing cows for production.....	741	12,704	1	3	6	70	748	12,777
Homes assisted in butter and cheese making.....	230	5,319	8	313	2	13	240	5,645
Farms feeding better-balanced rations.....	1,366	65,143	1	3	15	313	1,382	65,459
Farms having animals tested for tuberculosis.....	1,222	196,274	1	45	13	1,080	1,236	197,399

Farms having animals vaccinated for blackleg	380	11,242	1	6	1	3	382	11,251
Different farms adopting better practices	1,876	292,075	292	20,611	79	2,883	2,247	315,569
Beef cattle:								
Adult demonstrations	340	1,671			1	2	341	1,673
Junior ¹ demonstrations	353	4,070			29	383	382	4,453
Farms procuring purebred sires	696	4,795			8	17	704	4,812
Farms procuring purebred females	343	1,768			6	13	349	1,781
Farms feeding better-balanced rations	393	5,290	1	5	3	4	397	5,299
Farms having animals tested for tuberculosis	349	19,354	1	1	1	1	351	19,356
Farms having animals vaccinated for blackleg	449	22,725	1	9			450	22,734
Different farms adopting better practices	1,122	64,984	1	9	22	243	1,145	65,236
Sheep:								
Adult demonstrations	261	1,622			2	6	263	1,628
Junior ¹ demonstrations	158	1,170			41	354	199	1,524
Farms assisted in procuring purebred sires	561	2,493			8	44	569	2,537
Farms assisted in procuring purebred females	240	920			7	31	247	951
Farms feeding better-balanced rations	194	1,663			3	28	197	1,691
Farms controlling insect pests	195	4,597			1	5	196	4,602
Different farms adopting better practices	831	14,788			22	248	853	15,036
Swine:								
Adult demonstrations	754	7,424			2	7	756	7,431
Junior ¹ demonstrations	1,181	25,931	4	88	96	2,294	1,281	28,313
Farms assisted in procuring purebred sires	1,204	13,227			32	152	1,236	13,379
Farms assisted in procuring purebred females	992	14,467	1	10	36	550	1,029	15,027
Farms feeding better-balanced rations	735	29,855	1	7	10	138	746	30,000
Farms controlling insect pests	463	30,895	1	7	2	8	466	30,910
Farms having animals vaccinated for cholera	1,061	76,240	1	56	7	482	1,069	76,778
Different farms adopting better practices	1,766	144,430	4	229	64	2,210	1,834	146,869
Poultry:								
Adult demonstrations	1,057	16,542	371	48,779	5	38	1,433	65,359
Junior ¹ demonstrations	642	19,720	374	24,981	109	5,347	1,125	50,048
Farms assisted in procuring purebred sires	906	20,223	10	380	25	288	941	20,891
Farms assisted in procuring purebred females	603	17,189	8	336	29	522	640	18,047
Farms culling flocks	1,486	95,593	508	37,360	42	958	2,036	133,911
Farms feeding better-balanced rations	898	69,492	7	729	11	646	916	70,867
Farms controlling insect pests	760	69,091	6	1,018	6	167	772	70,276
Farms controlling poultry diseases	501	25,161	2	34			503	25,195
Different farms adopting better practices	1,825	213,633	557	91,840	77	4,246	2,459	309,719
Rural engineering:								
Adult demonstrations	698	9,425	88	1,684	2	6	788	11,115
Farms installing drainage systems	664	5,395	1	1			665	5,396
Farms constructing terraces or soil dams	705	21,026	1	2			706	21,028
Dwellings constructed according to plans	322	1,440	83	309			405	1,749
Dwellings remodeled according to plans	280	1,308	131	895			411	2,203
Sewage-disposal systems installed	454	1,781	101	536			556	2,322
Water systems installed	512	2,178	196	1,007	1	5	709	3,191
Heating systems installed	158	689	59	267	1	6	218	964
Lighting systems installed	447	3,428	167	1,219	1	8	616	4,654
Farms constructing or remodeling buildings other than dwellings	1,657	23,918	47	495	2	7	1,713	24,497
Farms clearing land	591	33,317	2	17	9	84	1,594	33,449
Homes influenced to adopt better practices	1,657	105,028	196	4,831	1	115	1,862	110,084

¹ Boys' and girls' club members.

TABLE 12.—Statistical summary of results of cooperative extension work, 1923—Continued

Project or line of work	Reported by county agents		Reported by home demonstration agents		Reported by club agents		Total	
	Agents reporting	Number	Agents reporting	Number	Agents reporting	Number	Agents reporting	Number
Rodents and other animal pests:								
Adult demonstrations.....	324	12,967	4	153	2	3	329	13,123
Farms adopting control measures.....	480	85,033	4	282	2	37	486	85,352
Grasshoppers and other insect pests:								
Adult demonstrations.....	394	15,020	3	19	2	6	399	15,045
Farms adopting control measures.....	496	87,991	3	25	2	8	501	88,024
Farm management:								
Farms keeping farm accounts.....	896	15,647	7	465	6	52	909	16,164
Juniors keeping farm accounts.....	108	5,796	1	178	6	44	115	6,018
Farms making recommended changes in business.....	543	6,524	4	61	4	413	551	6,998
Farms advised relative to leases.....	886	9,525	1	15	2	6	889	9,546
Farms keeping cost-of-production records.....	715	14,247	1	15	5	46	721	14,308
Farms making better use of labor.....	487	42,496	1	25	2	16	490	42,537
Farms assisted in obtaining credit.....	568	24,401	2	168	---	---	570	24,569
Different farms adopting better practices.....	1,002	158,128	7	743	6	194	1,015	159,065
Marketing:								
Associations assisted in organizing or cooperated with.....	1,192	6,018	127	234	3	10	1,322	6,262
Value of purchases.....	611	\$43,543,335	14	\$22,462	1	\$62,355	626	\$43,628,152
Savings in connection with such purchases.....	574	\$4,293,504	13	\$8,141	1	\$12,489	588	\$4,314,134
Value of sales.....	570	\$275,327,462	115	\$1,067,267	1	\$1,008,973	686	\$277,403,702
Profits in connection with such sales.....	494	\$20,610,851	79	\$394,857	1	\$153,233	574	\$21,158,941
Farms and homes assisted with marketing problems.....	1,081	926,203	117	11,703	3	1,392	1,201	939,298
Food selection:								
Adult demonstrations.....	130	2,379	573	54,389	6	235	709	57,003
Homes using more fruit in diet.....	124	11,073	645	109,160	10	666	779	120,899
Homes using more green vegetables in diet.....	134	12,542	676	134,755	8	1,239	818	148,536
Homes using more milk and other dairy products in diet.....	142	23,272	646	131,066	8	1,243	796	155,581
Homes using more unrefined cereal products in diet.....	78	7,378	455	47,365	4	797	537	55,540
Different homes adopting better practices.....	232	44,555	785	239,082	11	2,296	1,028	285,933
Bread making:								
Adult demonstrations.....	16	246	346	15,734	---	---	362	15,980
Junior ¹ demonstrations.....	114	1,932	449	20,216	47	2,058	610	24,206
Different homes adopting better practices.....	79	3,651	558	78,752	28	1,099	665	83,502
Meal preparation:								
Adult demonstrations.....	27	539	307	14,150	1	38	335	14,727
Junior ¹ demonstrations.....	65	842	326	14,084	52	1,665	443	16,591
Different homes adopting better practices.....	78	2,919	543	73,114	38	1,190	659	77,223

School lunches:									
Adult demonstrations.....	46	335	246	8,139	-----	292	8,474		
Junior 1 demonstrations.....	26	801	211	10,114	-----	252	13,003		
Different homes adopting better practices.....	67	2,617	445	55,625	-----	525	58,952		
Other food preparation:									
Adult demonstrations.....	6	43	106	3,874	-----	113	3,925		
Junior 1 demonstrations.....	7	187	113	5,044	-----	127	5,388		
Different homes adopting better practices.....	19	599	205	27,119	-----	227	27,823		
Child feeding and care:									
Demonstrations.....	59	506	306	12,992	-----	368	13,509		
Different homes adopting better practices.....	103	9,252	469	60,594	-----	576	70,359		
Food preservation:									
Adult demonstrations.....	41	1,291	498	61,049	-----	541	62,476		
Junior 1 demonstrations.....	190	4,972	509	38,864	-----	783	48,325		
Different homes adopting better practices.....	217	37,880	718	235,594	-----	1,000	284,639		
Quarts of food products canned.....	184	511,032	598	8,791,974	-----	875	9,516,751		
Pounds of food products dried.....	11	15,826	345	1,302,845	-----	360	1,319,215		
Quarts of food products brined and cured.....	14	18,143	251	5,337,911	-----	275	5,359,218		
Quarts of food products otherwise preserved.....	45	68,651	569	2,932,001	-----	645	3,023,877		
Clothing selection:									
Adult demonstrations.....	21	256	169	8,427	-----	190	8,683		
Junior 1 demonstrations.....	13	393	163	9,862	-----	181	10,967		
Different homes adopting better practices.....	32	1,462	269	44,013	-----	304	46,156		
Clothing construction:									
Adult demonstrations.....	231	7,918	502	38,167	-----	739	46,177		
Junior 1 demonstrations.....	317	13,604	554	40,433	-----	982	67,294		
Different homes adopting better practices.....	391	45,628	763	151,931	-----	1,228	207,889		
Clothing renovation:									
Adult demonstrations.....	29	417	220	7,011	-----	249	7,428		
Junior 1 demonstrations.....	5	55	154	4,215	-----	162	4,483		
Different homes adopting better practices.....	40	1,595	313	30,371	-----	355	32,002		
Millinery:									
Adult demonstrations.....	139	2,562	388	18,633	-----	529	21,238		
Junior 1 demonstrations.....	11	209	244	6,415	-----	262	6,847		
Different homes adopting better practices.....	191	12,725	542	63,841	-----	744	76,984		
Other clothing work:									
Adult demonstrations.....	14	140	100	3,588	-----	114	3,728		
Junior 1 demonstrations.....	9	343	90	4,589	-----	101	4,969		
Different homes adopting better practices.....	25	1,455	190	19,046	-----	217	20,561		
Home health and sanitation:									
Demonstrations.....	60	1,029	245	15,044	-----	306	16,075		
Different homes adopting better sanitary practices.....	156	21,315	512	88,007	-----	674	112,463		
Household management and home furnishing:									
Adult demonstrations.....	30	1,092	283	26,441	-----	315	27,541		
Junior 1 demonstrations.....	18	226	215	14,925	-----	246	15,429		
Homes rearranging kitchens.....	71	1,854	² 338	26,094	-----	² 416	27,990		
Homes installing new equipment.....	144	2,613	699	18,611	-----	849	21,258		
Homes refinishing furniture.....	53	939	120	4,057	-----	179	5,061		

¹ Boys' and girls' club members.
² "Homes rearranging kitchens" includes adult demonstrations in kitchen arrangement by home demonstration agents in 13 Southern States, since this question was not included in the special report form used in this group of States.

TABLE 12.—*Statistical summary of results of cooperative extension work, 1923—Continued*

Project or line of work	Reported by county agents		Reported by home demonstration agents		Reported by club agents		Total	
	Agents reporting	Number	Agents reporting	Number	Agents reporting	Number	Agents reporting	Number
Household management and home furnishing—Continued.								
Homes redecorating or refinishing rooms.....	55	1,485	119	2,915	7	83	181	4,483
Different homes adopting better practices.....	211	14,067	783	78,774	16	232	1,010	93,073
Beekeeping:								
Adult demonstrations.....	173	798	33	339	1	4	207	1,141
Junior ¹ demonstrations.....	57	328	14	106	7	81	78	515
Different farms adopting better practices.....	223	5,393	44	1,395	6	103	273	6,891
Miscellaneous agriculture:								
Adult demonstrations.....	47	852	13	508			60	1,360
Junior ¹ demonstrations.....	18	443	9	349	40	1,091	67	1,883
Different farms adopting better practices.....	57	4,299	14	1,389	18	580	89	6,268
Miscellaneous home economics:								
Adult demonstrations.....	26	463	195	14,364			221	14,827
Junior ¹ demonstrations.....	17	550	166	8,900	5	65	188	9,515
Different homes adopting better practices.....	34	1,500	246	25,175	1	13	281	26,688
Total:								
Adult demonstrations.....		282,395		438,099		954		721,448
Junior ¹ demonstrations.....		128,705		254,006		46,035		428,746
Farms or homes adopting better practices.....		3,860,437		1,546,256		55,833		5,462,526

¹ Boys' and girls' club members.

TABLE 13.—*Farmers' institutes conducted by the extension divisions of State agricultural colleges, fiscal year ended June 30, 1923*

State	Num-ber of in-stitutes	Total num-ber of days con-ducted	Total num-ber of ses-sions	Total attend-ance	Number of different persons who gave lectures					Amount of State appropria-tion used	Amount of other funds used
					From exten-sion staff	From exper-iment sta-tion staff	From State de-part-ment of agri-culture staff	From special force em-ployed for in-stitutes	Total num-ber of lect-urers		
Connecticut.....	40	50	98	1,147	27				27	\$496. 00	-----
Georgia.....	81	81	162	5,066	18	3	2	3	26	2,250. 00	-----
Idaho.....	9	15	40	3,824	7	8			15	1,769. 83	-----
Indiana.....	482	612	1,257	179,046	8	2		35	45	9,534. 55	\$20,392. 02
Iowa.....	130	328	1,040	93,293	60	12			72	-----	-----
Kansas.....	85	157	233	9,000	20	10			30	306. 63	-----
Minnesota.....	81	84	129	8,255				9	9	10,000. 00	-----
Montana.....	135	188	275	19,000	12	10	3	4	29	10,000. 00	-----
New York.....	192	194	362	12,414	17			14	31	11,540. 99	-----
Ohio.....	615	1,131	2,822	512,264	11	2		67	80	14,685. 00	35,057. 41
Tennessee.....	3	9	28	6,000	22	4	1		27	-----	-----
Utah.....	38	45	85	6,708	5	2			7	950. 00	-----
Virginia.....	1	2	4	250	3	3			6	100. 00	-----
West Virginia.....	110	110	200	7,562	8			4	12	-----	-----
Wisconsin.....	299	524	1,101	117,966	57	3	5	24	89	19,028. 02	-----
Total, 1923..	2,301	3,530	7,836	981,795	275	59	11	160	505	80,661. 02	55,449. 43
1922..	2,614	3,580	7,791	1,099,308	340				734	94,575. 35	39,730. 66
1921..	2,810	3,844	6,674	745,657	279				556	70,062. 59	13,390. 92
1920..	7,154	7,581	27,359	1,795,497	386				728	96,773. 88	42,607. 76
1919..	2,625	3,059	6,356	691,763	267				505	88,167. 49	23,106. 98

TABLE 14.—*Farmers' institutes conducted by the State departments of agriculture, fiscal year ended June 30, 1923*

State	Num-ber of in-stitutes	Total num-ber of days con-ducted	Total num-ber of ses-sions	Total attend-ance	Number of different persons who gave lectures					Amount of State appropria-tion used	Amount of other funds used
					From exten-sion staff	From exper-iment sta-tion staff	From State de-part-ment of agri-culture staff	From special force em-ployed for in-stitutes	Total num-ber of lect-urers		
Illinois.....	221	335	1,043	167,571	3	35	15	140	193	\$30,000. 00	-----
Iowa.....	73	232	575	74,227	60	12			72	3,932. 82	-----
Maine.....	454	500	550	27,000			15	5	20	2,000. 00	\$2,000. 00
Missouri.....	632	632	632	146,316		6	6		12	18,500. 00	-----
New Hampshire.....	36	36	90	2,700	5	4	3	8	20	1,500. 00	-----
New Jersey.....	61	65			1	6		53	60	2,668. 35	-----
North Dakota.....	120	240	240	17,779	26		5	9	40	1,000. 00	-----
Rhode Island.....	21	21	21	1,705	6	1	2	10	19	241. 83	-----
Total, 1923..	1,618	2,061	3,151	437,298	101	64	46	225	436	59,843. 00	2,000. 00
1922..	910	1,245	2,674	479,564	238				392	35,127. 25	309. 80
1921..	1,866	2,309	3,828	517,182	316				581	174,884. 87	9,312. 46
1920..	2,991	3,150	4,651	528,177	412				677	157,888. 65	7,112. 36
1919..	1,917	2,622	3,732	576,331	266				540	87,546. 60	7,069. 91

TABLE 15.—Expenditures for cooperative agricultural extension work for the year ended June 30, 1923, by items of expense

EXPENDITURES FROM THE UNITED STATES APPROPRIATION OF MAY 8, 1914 (FEDERAL SMITH-LEVER)

State	Total appropriation	Personal services—salaries and labor	Printing and cuts for publications	Supplies and material	Communication service	Transportation of things	Heat, light, and power	Equipment	Travel expenses	Miscellaneous	Unexpended balance
Alabama	\$203,201.83	\$164,051.31	\$761.89	\$4,229.21	\$1,873.97	\$412.73	\$50.52	\$3,453.48	\$28,337.72	\$31.00	—
Arizona	32,761.23	24,734.81	—	1,688.02	414.20	165.74	—	820.21	4,863.25	75.00	—
Arkansas	163,576.10	77,053.65	4,799.29	4,937.23	2,196.60	369.84	—	3,046.44	67,518.06	3,654.99	—
California	125,061.46	93,353.61	—	6,522.09	253.49	75.20	—	894.58	23,960.24	2.25	—
Colorado	61,101.07	44,542.59	2,239.38	1,591.91	722.23	129.15	5.82	534.10	11,277.17	58.72	—
Connecticut	56,680.09	55,907.80	—	—	8.50	—	—	—	763.79	—	—
Delaware	20,741.56	13,821.84	228.72	16.70	1.50	—	—	831.23	5,787.95	53.62	—
Florida	74,368.33	50,633.47	3,120.03	2,642.51	534.56	142.04	—	2,207.42	15,045.48	24.80	\$18.02
Georgia	237,780.76	186,196.39	6,012.83	5,288.20	1,305.34	152.01	1,446.00	635.89	36,744.10	—	—
Idaho	42,867.74	35,311.35	7,116.63	506.41	181.01	16.42	—	121.45	6,014.47	—	—
Illinois	228,495.98	196,840.69	5,246.62	2,868.96	904.30	55.73	—	3,251.71	19,325.99	1.98	—
Indiana	162,087.09	136,002.31	4,240.50	3,047.88	575.36	—	—	939.75	17,276.29	5.00	—
Iowa	170,596.43	161,971.80	—	—	—	—	—	—	8,624.63	—	—
Kansas	130,962.06	111,625.64	758.20	3,465.41	755.00	—	—	514.72	13,835.09	8.00	—
Kentucky	197,342.23	69,896.44	5,325.87	6,494.12	1,731.36	412.51	3,600.00	2,276.01	101,030.28	434.60	6,141.04
Louisiana	132,963.83	128,100.82	1,716.52	3,076.00	2.76	—	—	1,029.89	37.84	—	—
Maine	59,217.76	39,212.30	1,081.71	2,261.64	283.88	76.41	—	647.97	15,653.85	—	—
Maryland	70,963.51	63,573.62	312.62	630.14	287.27	11.40	1,000.00	198.78	4,949.68	—	—
Massachusetts	31,234.75	30,865.49	—	—	9.46	—	—	—	359.80	—	—
Michigan	159,913.95	159,913.95	—	48.97	—	—	—	—	—	—	—
Minnesota	150,319.33	120,394.40	603.50	1,007.09	148.85	19.42	—	14.95	29,692.74	—	—
Mississippi	172,904.83	134,043.68	9,950.10	4,343.63	1,673.40	150.77	4.65	659.05	34,356.84	405.85	—
Missouri	200,921.32	149,159.95	2,694.83	62.24	1,315.67	142.52	—	2,925.75	33,060.50	23.20	—
Montana	49,597.13	46,693.46	2,104.33	73.29	10.54	79	—	73	135.27	—	—
Nebraska	103,620.98	99,505.34	—	—	54.89	41.80	—	—	1,840.60	—	—
Nevada	16,530.11	14,757.58	—	407.93	83.00	35.19	—	304.69	1,941.72	—	—
New Hampshire	27,159.69	21,235.30	1,025.34	1,027.29	285.26	322.64	300.00	77.35	2,886.51	—	—
New Jersey	80,773.81	51,020.00	2,500.05	2,614.80	1,097.97	145.87	411.25	3,791.39	19,165.50	26.98	—
New Mexico	41,035.53	29,279.69	737.72	3,703.97	231.04	97.83	—	81.50	10,287.93	5.85	—
New York	198,634.11	155,394.74	3,821.73	4,707.88	2,685.24	2.33	—	2,953.87	28,130.64	8.50	929.18
North Carolina	227,356.06	166,260.92	4,002.83	4,542.47	1,430.86	281.87	—	1,316.26	49,461.91	58.94	—
North Dakota	68,694.01	51,532.40	1,871.33	2,803.49	1,397.07	134.30	—	404.97	10,535.60	14.85	—
Ohio	228,775.06	187,384.46	11,347.88	5,998.47	1,726.38	183.77	—	1,036.92	21,095.44	—	1.74
Oklahoma	166,422.88	123,258.79	2,325.81	3,509.99	1,086.13	118.82	—	197.65	35,921.92	2.25	1.52
Oregon	51,224.89	30,907.67	1,824.19	1,882.81	455.05	169.42	—	760.59	15,223.41	1.75	—
Pennsylvania	336,987.38	182,892.38	8,500.67	7,221.94	4,385.12	180.54	1,050.00	639.37	80,051.47	835.00	51,230.89
Rhode Island	11,598.82	8,524.74	617.62	372.07	32.00	—	—	466.88	1,585.51	—	—
South Carolina	156,014.49	113,400.09	1,458.80	3,771.16	1,873.87	252.18	601.50	2,065.41	32,562.32	29.16	—
South Dakota	66,176.30	54,632.45	—	2,686.06	285.18	31.89	4.40	427.95	8,107.62	.75	—
Tennessee	191,413.63	124,607.21	8,726.97	8,909.06	2,136.77	804.51	138.38	2,186.51	42,639.18	521.07	743.97

Texas	341, 015.26	199, 733.82	4, 426.80	8, 742.10	2, 570.94	188.92	3, 356.80	121, 292.63	586.50	116.75
Utah	34, 565.68	28, 981.49	288.25	459.55	317.76	4.55	28.85	4, 460.23	25.00	
Vermont	35, 473.53	26, 907.66	241.44	1, 021.35	407.84	149.95	747.63	5, 637.66		
Virginia	181, 804.66	148, 618.73	3, 267.10	7, 519.70	2, 134.22	481.69	813.96	18, 905.69	26.87	
Washington	73, 868.29	52, 862.77	2, 035.12	5, 732.84	358.67	127.01	495.45	12, 256.43		
West Virginia	125, 015.45	105, 300.70	2, 517.70	769.28			74.96	16, 352.81		
Wisconsin	155, 779.27	154, 328.78	1, 450.49							
Wyoming	24, 399.74	22, 263.36		214.08	15.51	9.29	14.05	1, 861.05	22.40	
Total, 1923	5, 880, 000.00	4, 447, 492.44	113, 901.41	130, 029.94	40, 240.02	16, 097.05	47, 247.12	1, 019, 854.81	6, 944.88	59, 183.11
1922	5, 580, 000.00	4, 265, 041.66	107, 237.37	106, 177.73	40, 165.09		40, 701.62	935, 937.26	7, 174.06	69, 650.55
1921 ²	5, 079, 999.05	3, 727, 417.45	96, 897.63	115, 770.50	47, 829.09		6, 269.91	920, 621.97	8, 656.26	105, 950.55
1920 ³	4, 512, 765.63	3, 210, 273.50	113, 311.71	127, 097.40	42, 254.14		4, 614.66	911, 947.11	6, 149.87	48, 421.27
1919	2, 580, 000.00	1, 660, 720.95	105, 120.93	134, 166.83	43, 054.00		2, 618.28	496, 439.74	5, 051.79	41, 171.96
1918	2, 080, 000.00	1, 381, 547.05	76, 910.28	109, 656.02	39, 627.12		2, 412.57	394, 481.91	1, 998.07	11, 933.71
1917	1, 580, 000.00	1, 140, 061.93	43, 927.84	52, 587.62	20, 041.81		1, 338.98	278, 867.24	1, 346.99	4, 945.62
1916	1, 080, 000.00	755, 165.64	27, 867.77	40, 863.34	12, 154.06		968.63	201, 084.45	415.34	2, 076.27
1915	480, 000.00	329, 143.14	8, 241.16	15, 463.39	5, 539.85		146.85	96, 402.41	228.41	5, 065.27

¹ Prior to 1923, transportation of things included in communication service.

² South Carolina failed to meet the full allotment to that State by \$0.95.

³ Pennsylvania failed to meet the full allotment to that State by \$67,234.37. South Carolina failed to meet the full allotment to that State by \$6,990.

TABLE 16.—Expenditures for cooperative agricultural extension work for the year ended June 30, 1923, by items of expense

EXPENDITURES FROM THE UNITED STATES APPROPRIATION OF MAY 8, 1914 (STATE SMITH-LEVER)

State	Total appropriation	Personal services—salaries and labor	Printing and cuts for publications	Supplies and material	Communication service	Transportation of things	Heat, light, and power	Equipment	Travel expenses	Miscellaneous	Unexpended balance
Alabama	\$193,201.83	\$177,066.78		\$1,249.37	\$629.99	\$84.87	\$12.12	\$290.25	\$13,840.22	\$28.23	
Arizona	22,761.23	20,282.66	\$383.89	28.99	22.24	21.65	8.55	3.25	1,940.00	70.00	
Arkansas	153,576.10	152,927.06		170.40	25.01	5.03		127.85		320.75	
California	115,061.46	115,061.46									
Colorado	51,101.07	35,591.26	1,885.27	2,213.92	697.56	102.75		1,146.55	9,430.56	33.20	
Connecticut	46,680.09	27,811.91			139.46				18,728.72		
Delaware	10,741.56	6,128.33	709.37	1,658.40	645.78	61.97		67.73	1,469.98		
Florida	64,368.33	50,044.86		539.12	409.26	11.90		869.75	12,475.42		\$18.02
Georgia	227,780.76	215,333.68		234.09	105.11	17.91		150.78	11,939.19		
Idaho	32,867.74	28,969.43	1,008.17	253.73	140.26	7.38		11.25	2,477.52		
Illinois	218,495.98	218,495.98									
Indiana	152,087.09	152,087.09									
Iowa	160,596.43	160,596.43									
Kansas	120,962.06	94,918.84	1,450.66	2,140.74	1,094.00			970.60	20,387.22		
Kentucky	187,342.23	181,201.19									
Louisiana	122,963.83	78,347.00	3,177.09	4,003.69	1,849.27	781.49	400.00	3,801.93	30,482.36	121.00	6,141.04
Maine	49,217.76	31,059.13		1,305.88	88.82	53.25		1,149.66	15,561.02		
Maryland	60,963.51	49,546.21	2,270.86	702.55	469.39	16.69		243.07	7,714.24	.50	
Massachusetts	21,234.75	21,234.75									
Michigan	149,913.95	145,991.07							3,922.88		
Minnesota	140,319.33	140,319.33									
Mississippi	162,904.83	151,035.09	2,604.50	2,029.24	565.28	258.63	699.80	432.29	5,280.00		
Missouri	190,921.32	147,685.80	939.10	1,432.63	96.44	12.53		965.16	39,789.66		
Montana	39,597.13	26,067.14	342.00	2,660.25	914.59	86.13		600.06	8,926.96		
Nebraska	93,620.98	82,560.38	732.98	2,933.13	251.46	289.53		244.55	6,602.25	6.70	
Nevada	6,530.11	1,788.68		1,109.74	376.04	27.81		784.50	2,440.79	2.55	
New Hampshire	17,159.69	14,782.03	650.28	518.44	43.26	13.34		133.14	1,019.20		
New Jersey	70,773.81	70,695.47			78.34						
New Mexico	31,035.53	17,617.10	611.95	2,045.34	600.77	268.46		809.91	9,077.55	4.45	
New York	188,634.11	187,704.93									929.18
North Carolina	217,356.06	189,486.08		2,116.07	981.90	344.82		1,325.78	22,991.67	109.74	
North Dakota	58,694.01	42,767.96	2,845.58	286.25	490.56	46.00	2,665.50	73.09	9,502.31	16.76	
Ohio	218,775.06	172,591.89		1,607.43	1,106.38			654.39	42,813.23		1.74
Oklahoma	156,422.88	155,316.17	299.30	686.00	37.81			82.08			1.52
Oregon	41,224.89	41,224.89									
Pennsylvania	326,987.38	205,079.22		4,612.12	7,307.84	361.64	68.50	1,080.95	54,117.26	3,128.96	51,230.89
Rhode Island	1,598.82	761.04	40.00	440.03	137.32			72.50	132.93	15.00	
South Carolina	146,014.49	116,621.31	5,435.83	923.14	1,187.45	81.86		69.00	20,560.40	1,135.50	
South Dakota	56,176.30	31,045.28	5,000.42	3,736.12	2,623.10	594.99		2,100.86	10,902.60	172.93	
Tennessee	181,413.63	173,585.78	1,395.43	851.89	510.36		942.83	944.95	2,438.42		743.97

Texas	331,015.26	297,522.53	2,259.41	50.50	54.47				31,116.57		116.75
Utah	24,565.68	23,376.83		151.10	10.55				1,037.46	45.00	
Vermont	25,473.53	23,588.00			13.49			1.42	1,305.49		
Virginia	171,804.66	119,132.41	7,539.41		197.08			404.90	44,935.76		
Washington	63,868.29	41,035.40	1,293.08	3,117.51	679.16	20.70		1,471.33	15,739.04		
West Virginia	115,015.45	109,564.30	43.50						5,407.65		
Wisconsin	145,779.27	95,825.62	8,972.05	3,852.37	1,389.82	9.45		1,735.58	33,751.93	60.87	
Wyoming	14,399.74	14,388.49		11.25	181.58						
Total, 1923	5,400,000.00	4,655,864.27	51,890.13	49,671.43	25,956.13	4,827.45	22,819.11	5,272.14	520,258.46	5,272.14	59,183.11
1922	5,100,000.00	4,254,787.62	74,254.76	49,834.16	27,459.91	5,105.09	24,684.34	7,187.79	587,035.78	7,187.79	69,650.55
1921 ¹	4,599,999.05	3,850,788.52	76,823.58	40,298.04	16,461.40	3,104.69	21,019.47	1,393.41	484,159.39	1,393.41	105,950.55
1920 ²	4,032,765.63	3,382,628.44	58,956.38	46,471.18	26,754.12	3,357.21	18,452.15	7,503.05	440,221.83	7,503.05	48,421.27
1919	2,100,000.00	1,484,785.07	55,540.79	77,990.43	28,237.75	2,824.06	33,157.82	6,522.71	369,769.41	6,522.71	41,171.96
1918	1,600,000.00	1,189,520.31	40,130.89	46,437.58	20,826.08	3,052.65	24,613.74	3,486.85	259,998.19	3,486.85	11,933.71
1917	1,100,000.00	825,004.97	34,822.25	32,507.55	12,441.66	232.44	17,015.59	1,884.86	171,145.06	1,884.86	4,945.62
1916	600,000.00	455,471.00	15,198.34	21,505.74	5,397.94	223.28	11,758.17	1,331.24	87,038.02	1,331.24	2,076.27

¹ Prior to 1923, transportation of things included in communication service.

² South Carolina failed to meet the full allotment to that State by \$0.95.

³ Pennsylvania failed to meet the full allotment to that State by \$67,234.37.

TABLE 17.—Expenditures for cooperative agricultural extension work for the year ended June 30, 1923, by projects

EXPENDITURES FROM THE UNITED STATES APPROPRIATION OF MAY 8, 1914 (FEDERAL SMITH-LEVER)

State	Total	Adminis- tration	Printing and distribu- tion of publica- tions	County agents	Home demon- stration ¹	Boys' and girls' club work	Home- economics special- ists ²	Exten- sion schools	Animal husban- dry	Poultry	Dairying	Animal diseases	Agron- omy
Alabama	\$203,201.83	\$18,329.81	\$761.89	\$114,292.31	\$43,959.51	\$4,485.86			\$4,795.20				\$2,198.39
Arizona	32,761.23	11,085.22		19,499.44	1,123.49				181.37	\$68.79	\$46.55		161.09
Arkansas	163,576.10	27,175.38	4,799.29	68,341.58	32,647.75			\$392.72	990.59	3,816.83	5,364.79		
California	125,061.46	5,133.18		49,258.96	60,779.29	7,131.87							
Colorado	61,101.07	11,502.32	2,239.38	32,070.48	894.24	6,375.91	1,565.48		2,165.49				634.66
Connecticut	56,680.09	5,251.15	3,096.67	7,546.85	4,529.57	6,533.93	7,770.18						3,240.00
Delaware	20,741.56	2,108.03	228.72	9,185.93	1,700.00	6,507.29				5,749.98	3,208.33		
Florida	74,368.33	12,987.70	3,199.61	39,143.71	2,015.85	4,857.44		569.66	4,772.73	2,610.45			
Georgia	237,780.76	12,658.24	6,074.83	128,112.29	54,665.95	7,086.61	8,083.02		4,871.09	5,133.44		\$26.77	8,409.56
Idaho	42,867.74	3,665.64	716.63	14,026.15	7,372.21	6,199.24	1,537.59		3,277.77		1,692.70		2,190.47
Illinois	228,495.98	17,360.32	5,246.62	97,709.50	36,961.57	13,758.84	18,328.50		5,431.03		5,534.98		10,423.74
Indiana	162,087.09	14,714.84	4,240.50	50,157.99	3,260.91	15,641.43	8,286.33	3,635.95	11,604.56	9,484.37	8,460.19		8,571.08
Iowa	170,596.43	13,850.00		75,221.43	17,400.00	14,650.00	25,900.00			2,800.00	4,950.00		3,500.00
Kansas	130,962.06	11,985.69	3,678.01	52,381.47	7,886.62	1,717.75	18,132.22	3,411.46	733.34	4,573.59	570.34	2,679.36	841.67
Kentucky	197,342.23	9,255.15	6,879.00	107,019.61	22,943.08	10,357.60	5,715.05	1,002.46	4,419.32	5,238.56	2,007.32	3,590.87	3,004.75
Louisiana	132,963.83	11,606.01	736.27	66,624.88	37,423.35	8,318.33			1,316.66	850.00	880.01	975.00	2,800.00
Maine	59,217.76	3,440.83	1,081.71	25,440.21	24,370.18	4,884.83							
Maryland	70,963.51	10,515.12	312.62	40,011.26	12,212.92	950.94			683.73	136.85	1,160.27		744.14
Massachusetts	31,234.75	738.99		6,309.34	2,146.33	8,148.39	2,143.94		1,542.50	1,902.50			1,831.25
Michigan	159,913.95			85,597.53	14,382.31	27,302.49	7,930.40		900.00		11,212.87		9,615.00
Minnesota	150,319.33	7,742.79		51,076.64	12,941.22	22,698.59	11,404.23		9,289.91	7,102.38	11,916.03	3,125.76	2,057.91
Mississippi	172,904.83	12,480.73	606.51	61,126.01	44,488.26	16,689.84			4,340.00		12,548.94		
Missouri	200,921.32	13,649.87	9,950.10	79,488.27	15,920.38	3,047.73	22,761.14		10,726.85	5,044.94	8,544.22		17,839.01
Montana	49,597.13	5,398.84	2,694.83	22,100.64	10,002.52	7,003.30	5,699.19		3,102.95	3,260.62	2,035.00		3,347.04
Nebraska	103,620.98	4,448.12	3,829.33	51,986.13	5,170.00	9,034.70				1,000.00	1,050.00		
Nevada	16,530.11	6,132.85		4,997.26	3,350.00								
New Hampshire	27,159.69	1,576.94	1,025.34	4,131.04	7,069.23	9,682.99							
New Jersey	80,773.81	13,235.65	2,964.18	24,440.79	9,864.53	13,307.65	3,316.09			5,106.12	3,674.15		1,493.98
New Mexico	41,035.53	12,097.85	684.02	24,567.34		3,686.32							
New York	198,634.11	7,194.66	3,881.73	42,446.03	38,860.37	23,937.27	25,826.72	12,900.54	3,936.93	4,470.77	1,060.88		9,466.42
North Carolina	227,356.06	18,203.99	7,947.60	154,578.95	36,020.42				73.20				
North Dakota	68,694.01	19,547.50	2,456.23	24,289.51	3,340.87								
Ohio	228,775.06	22,997.31	11,347.88	76,659.53	21,078.41	27,675.63	15,257.64		4,959.75	63.00	2,921.72		16,673.98
Oklahoma	166,422.88	4,094.93	3,523.39	84,034.35	58,477.47	4,385.14	2,405.29		1,502.16	2,213.01	1,291.36		1,201.54
Oregon	51,224.89	6,838.74	1,824.19	6,880.10	2,539.91	11,898.21	1,920.58		2,175.31	2,283.72	2,191.01		3,275.83
Pennsylvania	336,987.38	26,707.59	8,560.38	105,023.50		3,294.28	68,489.57		7,813.85	4,468.00	15,861.26		9,604.98
Rhode Island	11,598.82	2,079.10	617.62	1,956.82	2,871.81	2,801.27							1,096.00
South Carolina	156,014.49	25,262.28	1,458.80	35,151.64	38,280.58				12,540.98		11,031.58		20,414.23

South Dakota	66,176.30	10,499.40	---	22,299.15	342.35	917.00	5,813.62	---	4,000.51	3,363.59	3,697.92	3,431.04	3,373.09
Tennessee	191,413.63	15,188.65	8,726.97	69,227.84	35,466.72	4,073.35	6,792.02	4,053.91	12,524.59	4,411.82	7,771.42	---	8,820.46
Texas	341,015.26	39,776.26	5,418.24	166,583.97	77,200.15	5,919.48	10,550.03	---	3,306.57	4,033.66	5,797.24	---	3,050.22
Utah	34,565.63	5,227.68	288.25	15,971.87	7,523.78	---	1,216.71	---	1,190.62	284.89	427.73	---	1,831.75
Vermont	35,473.53	7,245.52	241.44	9,174.86	5,342.75	7,437.56	---	---	---	231.07	1,758.81	---	1,754.82
Virginia	181,804.66	30,595.67	3,822.60	103,874.35	23,514.43	7,818.58	---	---	---	12,179.03	---	---	---
Washington	73,868.29	15,310.90	2,183.32	24,367.20	7,022.33	8,016.88	3,791.55	219.92	655.26	3,177.67	1,526.17	---	2,452.14
West Virginia	125,015.45	587.24	2,948.58	54,661.46	23,368.33	30,794.99	---	---	210.16	149.70	39.57	---	2,568.33
Wisconsin	155,779.27	13,022.77	4,688.83	68,200.66	4,800.00	6,360.00	12,314.45	---	5,818.70	4,055.00	7,836.30	---	10,223.81
Wyoming	24,399.74	10,311.40	---	7,424.54	2,361.86	2,751.82	1,550.12	---	---	---	---	---	---
Total, 1923	5,880,000.00	560,818.85	134,982.11	2,484,671.37	885,893.81	388,141.33	321,699.57	27,557.00	135,853.68	112,673.45	149,978.94	13,828.80	178,711.34
1922	5,580,000.00	534,939.13	107,237.37	2,585,672.90	690,124.03	367,674.18	223,457.69	24,013.74	151,306.74	104,173.38	149,102.80	15,052.24	155,850.69
1921 ³	5,079,999.05	510,671.70	96,897.63	2,314,067.79	643,712.65	338,121.77	163,028.85	29,275.33	117,477.14	83,263.80	151,544.79	14,183.78	124,471.96
1920 ⁴	4,512,765.63	497,185.75	113,328.01	1,980,498.67	643,380.58	319,561.57	169,269.04	35,041.37	87,871.04	67,093.77	102,469.90	12,947.38	97,415.30
1919	2,580,000.00	497,041.99	105,120.93	655,145.98	395,631.98	143,219.87	---	46,439.03	93,866.43	59,589.20	85,229.65	14,524.65	101,141.49
1918	2,080,000.00	390,545.48	76,910.28	584,815.72	356,475.39	112,076.34	---	44,515.12	68,268.80	40,519.09	67,341.75	14,790.71	75,316.76
1917	1,580,000.00	249,738.80	43,881.48	453,417.17	261,229.14	105,290.22	---	69,425.12	59,018.49	26,507.94	49,536.76	11,807.83	56,668.96
1916	1,080,000.00	177,213.30	27,867.77	289,708.77	174,753.22	63,189.11	---	63,125.80	30,305.43	21,168.07	38,365.08	9,593.93	35,352.22
1915	480,000.00	86,278.39	8,241.16	128,083.33	69,890.05	32,944.29	---	33,821.65	8,640.84	5,735.83	16,269.72	3,930.67	9,191.99

State	Horti- culture	Botany and plant pathology	Ento- mology	Forestry	Agricul- tural engi- neering	Farm man- agement	Rural or- ganization	Marketing	Exhibits and fairs	Rodent pests	Miscella- neous spe- cialists	Balance
Alabama	\$1,724.44	\$196.11	\$630.81	---	\$3,067.46	---	---	\$8,414.06	---	---	\$345.98	---
Arizona	595.28	---	---	---	546.14	\$1,302.73	---	9,510.78	---	\$54.61	---	---
Arkansas	3,863.01	---	---	---	---	2,758.16	---	---	---	---	---	---
California	---	---	---	---	---	2,708.19	---	560.41	---	---	---	---
Colorado	---	---	62.13	---	322.38	---	---	2,750.00	---	---	---	---
Connecticut	5,541.66	---	---	---	---	1,491.77	---	---	---	---	---	---
Delaware	831.59	180.00	---	---	---	---	---	---	---	---	---	\$18.02
Florida	---	4,193.16	---	---	---	---	---	52.12	\$2,606.84	---	---	---
Georgia	---	---	---	---	---	---	---	---	---	---	---	---
Idaho	1,376.58	---	812.76	---	---	---	---	---	---	---	---	---
Illinois	6,216.50	---	---	---	3,998.27	7,526.11	---	---	---	---	---	---
Indiana	9,076.02	---	---	---	3,173.06	4,216.32	---	---	---	---	---	---
Iowa	---	---	---	---	---	6,700.00	---	5,625.00	---	---	---	---
Kansas	4,717.05	252.05	4,252.28	---	8,631.86	2,412.98	---	---	---	2,104.32	---	6,141.04
Kentucky	3,347.33	---	---	---	2,172.26	2,936.88	---	1,311.95	---	---	---	---
Louisiana	1,066.66	---	366.66	---	---	---	---	---	---	---	---	---
Maryland	2,691.91	1,085.35	448.81	---	---	---	---	9.59	---	---	---	---
Massachusetts	2,901.77	---	---	\$22.24	---	1,435.00	---	2,112.50	---	---	---	---
Michigan	1,973.35	---	1,000.00	---	---	---	---	---	---	---	---	---

¹ Prior to 1920, included home-economics specialists.

² Prior to 1920, included under home demonstration work.

³ South Carolina failed to meet the full allotment to that State by \$0.95.

⁴ Pennsylvania failed to meet the full allotment to that State by \$67,234.37.

TABLE 17.—*Expenditures for cooperative agricultural extension work for the year ended June 30, 1923, by projects—Continued*

EXPENDITURES FROM THE UNITED STATES APPROPRIATION OF MAY 8, 1914 (FEDERAL SMITH-LEVER)—continued

State	Horti- culture	Botany and plant pathology	Ento- mology	Forestry	Agricul- tural engi- neering	Farm man- agement	Rural or- ganization	Marketing	Exhibits and fairs	Rodent pests	Miscella- neous spe- cialists	Balance
Minnesota	\$1,704.10	\$3,743.54				\$3,709.57		\$1,806.66				
Mississippi					\$4,926.21			15,698.33				
Missouri	7,132.82		\$717.92					6,098.07				
Montana						2,397.00						
Nebraska	3,039.94				4,163.01	890.20		3,614.75				
New Jersey	5,135.54											
New York	5,310.48	6,297.70	3,976.81	\$300.04	1,944.75	5,777.20	\$115.63			\$85.70		\$929.18
North Carolina	6,845.13	3,601.07										
North Dakota		1,295.69										
Ohio	9,445.54		4,819.00			648.62		1,794.95				1.74
Oklahoma	1,235.72		838.83		7,558.59	3,145.77		3,623.10				1.52
Oregon	1,100.07				1,218.17							
Pennsylvania	4,502.00	10,673.79	4,178.17	4,204.15	1,221.74	3,018.36	8,812.57	2,686.74				51,230.89
Rhode Island						3,562.40						
South Carolina		4,997.34				176.20						
South Dakota	2,024.84		3,184.42		3,338.26	1,915.95		4,852.22				
Tennessee					3,610.99			10,000.92				743.97
Texas	4,578.21		2,418.06		2,385.92		4,467.63	5,412.87				116.75
Texas					300.00			302.40				
Utah						2,286.70						
Vermont	2,690.65	1,399.51	253.35		306.43	431.71			\$63.30			
Washington	6,682.97	3,004.12										
West Virginia	6,415.00	5,868.75	2,100.00		2,025.00							
Wisconsin						2,050.00						
Total, 1923	113,766.16	54,351.72	30,060.01	4,526.43	54,910.50	63,497.82	13,395.83	86,237.42	2,670.14	2,244.63	\$345.98	59,183.11
1922	119,494.94	42,662.39	27,482.48	409.84	57,612.13	65,492.11	4,552.23	70,812.25	1,647.17	600.00	10,979.02	69,650.55
1921	120,881.01	39,347.39	31,290.85	1,183.59	75,761.33	45,856.28	7,313.30	61,357.69	499.98	550.00	3,289.89	105,950.55
1920	94,734.69	38,021.20	23,249.32	2,248.18	58,678.38	45,260.73	8,660.11	61,803.38	1,723.91		3,992.08	48,421.27
1919	89,593.31	40,819.23	21,307.37	2,089.12	50,945.46	48,087.69	20,794.66	57,132.80	1,943.32	388.18	8,775.70	41,171.96
1918	73,870.57	24,800.53	7,659.64	1,201.41	24,119.45	34,733.81	15,744.60	33,629.68	2,680.84	864.25	17,186.07	11,933.71
1917	45,773.14	11,691.68	7,957.23	4,591.58	21,730.76	32,786.96	10,510.03	18,374.98	2,455.40		32,660.70	4,945.63
1916	42,949.87	6,801.49	4,603.57	358.45	15,680.02	34,004.56	3,197.59	7,204.80	748.84		31,731.84	2,076.27
1915	16,309.53	400.00	440.00		1,180.15	4,369.31	126.00	2,298.60	3,712.95		43,070.27	5,065.27

TABLE 18.—Expenditures for cooperative agricultural extension work for the year ended June 30, 1923, by projects

EXPENDITURES FROM THE UNITED STATES APPROPRIATION OF MAY 8, 1914 (STATE SMITH-LEVER)

State	Total	Adminis- tration	Printing and dis- tribution of publi- cations	County agents	Home demon- stration ¹	Boys' and girls' club work	Home- economics special- ists ²	Exten- sion schools	Animal husbandry	Poultry	Dairying	Animal diseases	Agron- omy
Alabama	\$193,201.83	\$10,093.63		\$89,893.35	\$73,498.19	\$1,281.28			\$3,810.87				\$2,540.24
Arizona	22,761.23	55.50	\$383.89	5,608.31	9,281.54				1,368.67	\$900.00	\$1,299.84		1,249.92
Arkansas	153,576.10	7,769.04		82,291.15	52,945.59				533.66	490.00	767.00		
California	115,061.46			98,011.82		17,049.64							
Colorado	51,101.07	8,834.09	1,885.27	18,853.62	2,308.68	407.26	5,273.21		7,021.48				3,285.30
Connecticut	46,680.09	4,638.33	1,283.44	2,406.90	329.95	6,388.09	4,195.74		2,494.26	3,658.66	4,103.70		924.43
Delaware	10,741.56	4,212.77	709.37	3,380.72		1,943.83							
Florida	64,368.33			18,831.88	45,518.43								
Georgia	227,780.76	26,834.35		95,323.76	78,644.22	3,343.20					5,448.11	\$1,366.88	
Idaho	32,867.74	2,996.30	1,008.17	8,606.73	2,534.03	3,008.00	1,150.00		5,000.00		2,270.00		2,449.36
Illinois	218,495.98			218,495.98									
Indiana	152,087.09			152,087.09									
Iowa	160,596.43			138,596.43	19,000.00	3,000.00							
Kansas	120,962.06	2,522.28	1,770.34	64,862.26	7,725.97	8,801.25	903.05	\$1,104.96	10,194.40	613.16	7,663.25		10,495.92
Kentucky	187,342.23	14,604.15		69,479.30	33,860.50	16,810.98	7,107.50		9,324.98	6,636.68	3,024.99		6,349.98
Louisiana	122,963.83	16,367.45	6,433.36	49,060.74	7,851.18	2,372.96			9,192.19	7,777.93	6,610.00	213.46	1,423.61
Maine	49,217.76	11,027.23		19,231.18			4,303.83		2,788.34	3,547.11	3,263.80		3,847.80
Maryland	60,963.51	9,319.57	2,270.86	18,624.23	8,920.54	5,979.33				2,448.12	2,391.13		3,122.07
Massachusetts	21,234.75			8,251.06	4,401.16	8,582.53	4,407.56		2,450.37	5,156.50	1,933.29		2,675.00
Michigan	149,913.95	13,705.80		81,129.42	730.05	1,059.95							
Minnesota	140,319.33			140,319.33									
Mississippi	162,904.83	5,618.93	3,531.54	79,237.33	57,102.57	3,609.88				3,233.51			
Missouri	190,921.32	5,019.45	939.10	137,580.42	23,030.78	2,117.75	5,780.95		3,200.30	2,718.18	2,097.62		4,694.20
Montana	39,597.13	9,603.51		10,493.62	4,300.00	2,200.00	10,000.00						
Nebraska	93,620.98	8,627.78	2,685.27	54,112.86	2,598.49	4,255.01	7,912.96		3,334.33	2,743.06	438.52		2,453.36
Nevada	6,530.11	1,858.05		1,807.53	2,164.53					275.00	425.00		
New Hampshire	17,159.69	7,802.80	650.28	5,925.65									
New Jersey	70,773.81	7,223.34	190.00	19,579.81	5,914.00	12,378.34	6,583.32			4,790.00	3,275.00		3,640.00
New Mexico	31,035.53	4,370.74	516.51	9,440.78	3,639.38		625.15				1,250.27	2,359.14	4,071.36
New York	188,634.11	982.19		107,825.31	40,729.38	1,586.13	11,061.92	1,670.00	4,850.00	4,850.00	2,000.00		900.00
North Carolina	217,356.06	6,194.86	724.92	73,762.58	65,566.79				31,324.87				16,385.84
North Dakota	58,694.01	2,665.50	2,845.58	22,094.78	3,636.58	6,178.72	223.07		3,921.63	1,922.31	4,173.37	4,516.33	
Ohio	218,775.06	18,150.46		148,221.30	4,288.07	15,069.64	5,358.00		4,434.06	4,758.67	2,460.07		9,470.62
Oklahoma	156,422.88	17,433.08	2,489.80	82,362.54	14,919.17	10,633.33	4,900.00		2,766.68	5,793.89	3,620.00		2,497.26
Oregon	41,224.89	6,870.00		14,824.51	600.00	3,169.57	3,735.00		1,500.00	1,500.00	2,250.00		525.00
Pennsylvania	326,987.38	27,351.97		143,331.96	22,690.68	10,232.19			7,190.63	15,811.25	10,855.40		12,345.94
Rhode Island	1,598.82	799.56	40.00	148.55	222.06	330.22							46.00

¹ Prior to 1920, included home-economics specialists.

² Prior to 1920, included under home demonstration work.

TABLE 18.—Expenditures for cooperative agricultural extension work for the year ended June 30, 1923, by projects—Continued

EXPENDITURES FROM THE UNITED STATES APPROPRIATION OF MAY 8, 1924 (STATE SMITH-LEVER)—continued

State	Total	Adminis- tration	Printing and dis- tribution of publi- cations	County agents	Home demon- stration ¹	Boys' and girls' club work	Home- economics special- ists ²	Exten- sion schools	Animal husbandry	Poultry	Dairying	Animal diseases	Agron- omy
South Carolina	\$146,014.49	\$1,041.69	\$5,435.83	\$76,542.50	\$53,207.61	\$5,454.24				\$3,701.84	\$911.50	\$1,461.17	\$2,514.16
South Dakota	56,176.30	15,522.62	5,000.42	4,661.59	4,663.17	12,729.12			\$2,561.60	1,229.31			
Tennessee	181,413.63	20,177.09	1,395.43	110,519.27	47,216.13								
Texas	331,015.26		9,099.94	219,196.23	63,633.00	2,700.00	4,250.00		5,900.00	4,441.67	4,207.67		2,600.00
Utah	24,565.68	1,415.88		16,094.66	4,625.89					600.00	1,200.00		
Vermont	25,473.53	1,607.95		9,693.52	5,869.87	4,329.20				769.80	2,399.55		175.41
Virginia	171,804.66			58,271.20	53,598.44	57.21			8,778.57		13,498.76		4,397.68
Washington	63,868.29	6,649.80	8,769.41	7,541.70	3,177.37	4,275.24	9,602.45		3,939.37	2,239.14	6,755.00		2,775.64
West Virginia	115,015.45	17,466.15	2,114.13	52,018.24	14,711.54	8,758.49			7,759.51	6,451.13	5,106.92	629.34	
Wisconsin	145,779.27	5,166.51	10,369.62	81,921.41	1,372.14	2,502.62	5,068.26	\$2,731.37	4,421.40	1,456.17	9,712.25		7,359.92
Wyoming	14,399.74	11.25		9,516.49	3,600.00	872.00				400.00			
Total, 1923	5,400,000.00	332,631.65	74,414.38	2,940,071.60	831,627.67	193,467.20	104,525.11	5,506.33	150,062.17	100,913.09	115,412.01	10,546.32	115,216.02
1922	5,100,000.00	299,388.81	78,678.18	2,669,702.27	775,682.83	228,517.62	200,301.69	16,517.56	117,689.62	89,407.18	88,359.26	10,248.45	128,143.57
1921 ¹	4,599,999.05	299,526.68	76,823.58	2,348,738.60	761,014.77	215,447.91	94,802.54	22,731.78	104,050.07	77,498.14	74,905.25	15,728.27	100,675.72
1920 ²	4,032,765.63	247,554.18	58,956.38	2,204,209.25	589,724.44	178,287.12	117,032.75	47,019.29	84,244.58	61,520.81	50,416.25	14,135.15	70,309.47
1919	2,100,000.00	252,329.45	55,540.79	941,902.93	293,869.64	112,706.28		28,667.68	55,747.75	34,779.81	48,483.73	11,498.94	42,585.94
1918	1,600,000.00	178,212.44	40,130.89	766,416.54	197,262.21	80,315.51		35,850.11	44,274.89	22,973.75	45,155.37	8,054.15	44,613.67
1917	1,100,000.00	97,302.53	34,819.50	541,495.05	126,235.78	50,209.68		36,501.94	27,199.22	12,722.78	24,306.88	5,230.27	26,433.67
1916	600,000.00	90,055.50	15,198.34	283,077.42	68,468.44	28,473.54		25,754.65	7,305.47	7,102.61	9,905.43	2,406.88	9,439.85

State	Horticul- ture	Botany and plant pathology	Entomo- logy, api- culture, ornitho- logy	Forestry	Agricul- tural engi- neering	Farm manage- ment	Rural organiza- tion	Marketing	Exhibits and fairs	Rodent pests	Miscella- neous	Balance
Alabama	\$3,352.57	\$1,130.03	\$2,362.01		\$3,546.02			\$1,686.38	\$463.57		\$7.26	
Arizona	2,149.99											
Arkansas	530.00					\$500.00		4,818.09		\$1,620.00		
Colorado			612.85		2,031.12	168.77		2,728.10				
Connecticut	4,756.28		2,435.07		2,106.01	2,612.73						
Delaware		164.92										

¹ South Carolina failed to meet the full allotment to that State by \$0.95.

² Pennsylvania failed to meet the full allotment to that State by \$67,234.37.

TABLE 19.—Sources of offset to Federal Smith-Lever funds for the fiscal year ended June 30, 1923

State	Total	State	County	College	Other	Unexpended balance
Alabama	\$193, 201. 83	\$107, 061. 67	\$85, 350. 24		\$789. 92	
Arizona	22, 761. 23	22, 761. 23				
Arkansas	153, 576. 10	87, 873. 38	65, 702. 72			
California	115, 061. 46	115, 061. 46				
Colorado	51, 101. 07	40, 020. 30	11, 080. 77			
Connecticut	46, 680. 09	46, 680. 09				
Delaware	10, 741. 56	10, 741. 56				
Florida	64, 368. 33	48, 854. 23	15, 496. 08			\$18. 02
Georgia	227, 780. 76	100, 000. 00	127, 780. 76			
Idaho	32, 867. 74	32, 867. 74				
Illinois	218, 495. 98	111, 487. 64			107, 008. 34	
Indiana	152, 087. 09	82, 727. 07	69, 360. 02			
Iowa	160, 596. 43		160, 596. 43			
Kansas	120, 962. 06	78, 632. 85	42, 329. 21			
Kentucky	187, 342. 23	125, 373. 63	55, 827. 56			6, 141. 04
Louisiana	122, 963. 83	83, 862. 67	39, 101. 16			
Maine	49, 217. 76	40, 957. 28	8, 260. 48			
Maryland	60, 963. 51	60, 963. 51				
Massachusetts	21, 234. 75	21, 234. 75				
Michigan	149, 913. 95	69, 352. 06	80, 561. 89			
Minnesota	140, 319. 33	73, 107. 34	67, 211. 99			
Mississippi	162, 904. 83	67, 550. 00	95, 354. 83			
Missouri	190, 921. 32	65, 682. 74	125, 238. 58			
Montana	39, 597. 13	39, 597. 13				
Nebraska	93, 620. 98	36, 794. 27	56, 826. 71			
Nevada	6, 530. 11	6, 530. 11				
New Hampshire	17, 159. 69	17, 159. 69				
New Jersey	70, 773. 81	70, 773. 81				
New Mexico	31, 035. 53	23, 564. 01	7, 471. 52			
New York	188, 634. 11	110, 323. 49	77, 381. 44			929. 18
North Carolina	217, 356. 06	151, 438. 59	64, 378. 43	\$1, 539. 04		
North Dakota	58, 694. 01	58, 694. 01				
Ohio	218, 775. 06	150, 599. 17	68, 174. 15			1. 74
Oklahoma	156, 422. 88	118, 765. 52	37, 655. 84			1. 52
Oregon	41, 224. 89	41, 224. 89				
Pennsylvania	326, 987. 38	228, 843. 92	46, 912. 57			51, 230. 89
Rhode Island	1, 598. 82	1, 598. 82				
South Carolina	146, 014. 49	104, 808. 27	41, 206. 22			
South Dakota	56, 176. 30	56, 176. 30				
Tennessee	181, 413. 63	55, 739. 32	121, 510. 34	3, 420. 00		743. 97
Texas	331, 015. 26	251, 209. 65	79, 688. 86			116. 75
Utah	24, 565. 68	24, 565. 68				
Vermont	25, 473. 53	25, 473. 53				
Virginia	171, 804. 66	169, 209. 58	2, 595. 08			

Washington	63, 868. 29	63, 868. 29	72, 050. 77	90, 606. 27	107, 798. 26	59, 183. 11
West Virginia	115, 015. 45	42, 964. 68	44, 868. 57		99, 671. 73	69, 650. 55
Wisconsin	145, 779. 27	10, 304. 43			8, 808. 44	105, 950. 55
Wyoming	14, 399. 74	14, 399. 74			257, 665. 97	48, 421. 27
					156, 394. 03	41, 171. 96
Total, 1923	5, 400, 000. 00	3, 367, 480. 10	1, 769, 973. 22	95, 565. 31	59, 658. 62	11, 933. 71
1922	5, 100, 000. 00	3, 160, 939. 21	1, 712, 675. 09	57, 063. 42	48, 383. 33	4, 945. 62
1921 ¹	4, 599, 999. 05	2, 858, 480. 54	1, 518, 778. 45	107, 981. 07	31, 212. 76	2, 076. 27
1920 ²	4, 032, 765. 63	2, 439, 467. 52	1, 095, 923. 84	191, 287. 03		
1919	2, 100, 000. 00	1, 539, 300. 08	316, 367. 59	46, 766. 34		
1918	1, 600, 000. 00	1, 262, 305. 01	215, 077. 20	51, 025. 46		
1917	1, 100, 000. 00	893, 058. 99	94, 556. 74	59, 055. 32		
1916	600, 000. 00	470, 649. 42	69, 226. 79	26, 834. 76		

¹ South Carolina failed to meet full allotment to that State by \$0.95.
² Pennsylvania failed to meet full allotment to that State by \$67,234.37.

TABLE 20.—Total expenditures of funds from all sources for cooperative agricultural extension work in States for the year ended June 30, 1923

BY SOURCES OF FUNDS ¹

State	Total	United States Department of Agriculture			Smith-Lever		State	County	College	Other
		Farmers' cooperative demonstration work	Other bureaus	Smith-Lever						
				Federal	State					
Alabama	\$446,368.41	\$32,500.98	\$9,220.00	\$203,201.83	\$193,201.83	\$8,243.77				
Arizona	116,204.56	12,554.68	15,914.70	32,761.23	22,761.23	13,546.08				
Arkansas	411,430.91	31,098.71	4,495.00	163,576.10	153,576.10	2,834.64			\$5,922.26	
California	616,828.68	20,866.90	18,230.23	125,061.46	115,061.46	177,455.63				
Colorado	216,742.56	22,656.81	13,670.81	61,101.07	51,101.07	9,799.80				
Connecticut	238,182.70	13,724.50		56,680.09	46,680.09	26,891.79				
Delaware	38,421.99	6,925.83		20,741.56	10,741.56					
Florida	244,032.96	21,859.05	136.00	74,350.31	64,350.31	9,506.85			13.04	
Georgia	551,855.90	38,083.11	3,435.47	237,780.76	227,780.76	37,250.00			1,350.00	
Idaho	218,443.81	24,378.04	20,453.74	42,867.74	32,867.74	28,639.81				
Illinois	871,345.27	981.10	44.74	228,495.98	218,495.98	9,233.36				
Indiana	476,856.96	18,746.44	167.10	162,087.09	152,087.09	43,700.09			67,053.41	
Iowa	931,613.56	13,766.03	373.19	170,596.43	160,596.43	203,381.48			152,900.00	
Kansas	465,921.90	11,425.68	4,234.16	130,962.06	120,962.06	49,265.92			60,037.20	
Kentucky	422,482.54	31,406.46	71.61	191,201.19	181,201.19	2,257.46			15,821.01	
Louisiana	347,812.60	31,099.68	1,473.60	132,963.83	122,963.83	3,065.64			54,912.84	
Maine	134,263.32	18,865.88		59,217.76	49,217.76	684.73			6,277.19	
Maryland	247,830.34	19,336.71	6,423.87	70,963.51	60,963.51	51,366.74			38,776.00	
Massachusetts	384,080.83	25,567.80	23.87	31,234.75	21,234.75	80,175.66			225,844.00	
Michigan	426,753.32	8,453.58	1,200.00	159,913.95	149,913.95	72,504.73			34,767.11	
Minnesota	467,966.19	12,130.74	1,690.77	150,319.33	140,319.33	41,070.36			70,919.66	
Mississippi	460,508.77	37,803.07	4,374.72	172,904.83	162,904.83	3,813.91			78,707.41	
Missouri	433,789.44	13,505.10	606.47	200,921.32	190,921.32				1,325.32	
Montana	298,276.98	27,675.83	16,597.37	49,597.13	39,597.13	73,970.66			90,838.86	
Nebraska	329,061.54	12,895.58	6,133.75	103,620.98	93,620.98	34,507.96			78,282.29	
Nevada	99,746.34	11,475.25	11,261.25	16,530.11	6,530.11	8,339.78			45,609.84	
New Hampshire	125,542.87	18,051.25	47.75	27,159.69	17,159.69	7,719.31			55,405.18	
New Jersey	271,626.34	14,476.62	110.65	80,773.81	70,773.81	240.00			105,251.45	
New Mexico	146,821.78	21,053.41	13,479.00	41,035.53	31,035.53	20,022.13			20,022.13	
New York	1,250,029.14	10,976.55	1,847.75	197,704.93	187,704.93	268,170.40			580,423.81	
North Carolina	573,644.85	33,701.84	18,769.77	227,356.06	217,356.06				76,461.12	
North Dakota	266,395.84	27,069.54	5,930.08	68,694.01	58,694.01	21,959.00			84,049.20	
Ohio	597,325.95	9,274.55	2,514.92	228,773.32	218,773.32	41,643.73			94,146.17	
Oklahoma	468,041.54	32,718.88	5,593.00	166,421.36	156,421.36				106,886.94	
Oregon	288,736.48	24,508.71	13,944.21	51,224.89	41,224.89	81,607.73			74,597.22	
									1,628.83	

Pennsylvania-----	575, 010. 93	311. 74	136. 00	285, 756. 49	275, 756. 49	13, 050. 21	-----	-----
Rhode Island-----	33, 044. 94	7, 647. 30	-----	11, 598. 82	1, 598. 82	6, 100. 00	-----	-----
South Carolina-----	405, 372. 24	31, 661. 39	609. 27	156, 014. 49	146, 014. 49	64, 072. 60	-----	-----
South Dakota-----	349, 472. 84	23, 165. 05	8, 096. 64	66, 176. 30	56, 176. 30	70, 911. 10	-----	-----
Tennessee-----	421, 508. 85	35, 861. 03	5, 964. 94	190, 669. 66	180, 669. 66	124, 947. 45	-----	-----
Texas-----	903, 406. 04	56, 249. 94	9, 353. 61	340, 898. 51	330, 898. 51	166, 005. 47	-----	-----
Utah-----	138, 976. 56	18, 363. 73	17, 138. 67	34, 565. 68	24, 565. 68	1, 813. 66	-----	-----
Vermont-----	134, 345. 66	19, 625. 17	190. 01	35, 473. 53	25, 473. 53	15, 297. 25	-----	30, 443. 51
Virginia-----	511, 915. 12	31, 040. 58	353. 11	181, 804. 66	171, 804. 66	74, 324. 70	-----	15, 838. 92
Washington-----	314, 910. 84	25, 920. 59	12, 022. 66	73, 868. 29	63, 868. 29	138, 120. 05	-----	-----
West Virginia-----	295, 431. 84	18, 112. 32	750. 00	125, 015. 45	115, 015. 45	50, 000. 00	-----	-----
Wisconsin-----	377, 022. 75	7, 306. 81	6, 157. 40	155, 779. 27	145, 779. 27	32, 777. 97	-----	-----
Wyoming-----	139, 439. 22	17, 848. 75	12, 290. 38	24, 399. 74	14, 399. 74	-----	-----	-----
Total, 1923-----	18, 484, 845. 00	1, 004, 729. 29	275, 532. 24	5, 820, 816. 89	5, 340, 816. 89	3, 420, 000. 81	-----	910, 182. 35
1922-----	17, 181, 751. 64	1, 007, 263. 48	209, 540. 93	5, 510, 349. 45	5, 030, 349. 45	2, 972, 740. 71	-----	954, 127. 91
1921-----	16, 792, 248. 32	1, 025, 083. 33	435, 046. 70	4, 974, 048. 50	4, 494, 048. 50	3, 293, 566. 38	-----	1, 020, 557. 61
1920-----	14, 658, 079. 92	1, 021, 091. 39	406, 020. 96	4, 464, 344. 36	3, 984, 344. 36	2, 865, 739. 87	-----	672, 073. 26
1919-----	14, 661, 560. 50	² 5, 564, 839. 70	935, 373. 64	2, 538, 828. 04	2, 058, 828. 04	2, 291, 209. 30	-----	370, 653. 29
1918-----	11, 302, 764. 75	³ 3, 900, 406. 30	507, 282. 95	2, 068, 066. 29	1, 588, 066. 29	1, 863, 632. 29	-----	494, 219. 38
1917-----	6, 149, 619. 63	958, 333. 87	185, 893. 15	1, 575, 054. 38	1, 095, 054. 38	1, 258, 296. 14	-----	244, 873. 55
1916-----	4, 864, 180. 94	900, 389. 92	165, 172. 01	1, 077, 923. 73	597, 923. 73	220, 934. 32	-----	276, 786. 09
1915-----	3, 597, 235. 85	905, 782. 00	105, 168. 40	474, 934. 73	-----	780, 331. 79	-----	286, 748. 55

¹ This does not include the cost of maintaining the Federal office with headquarters at Washington, D. C., amounting to \$307,183.17.

² Includes \$4,598,243.13 emergency funds.

³ Includes \$2,949,072.48 emergency funds.

TABLE 21.—Total expenditures of funds from all sources for cooperative agricultural extension work in States for the year ended June 30, 1923

BY ITEMS OF EXPENSE¹

State	Total appro- priation	Personal serv- ice—salaries and labor	Publica- tions	Supplies and material	Communi- cation service	Transpor- tation of things	Heat, light, water, and power	Equipment	Travel expenses	Miscel- laneous
Alabama.....	\$446, 368. 41	\$387, 279. 28	\$761. 89	\$5, 819. 72	\$2, 503. 96	\$626. 02	\$62. 64	\$3, 743. 73	\$45, 511. 94	\$59. 23
Arizona.....	116, 204. 56	69, 706. 56	434. 89	3, 692. 40	1, 175. 26	768. 87	69. 20	3, 132. 04	35, 471. 89	1, 753. 45
Arkansas.....	411, 430. 91	321, 811. 69	5, 115. 99	5, 134. 38	2, 221. 61	381. 51	-----	3, 174. 29	69, 580. 70	4, 010. 74
California.....	616, 828. 68	428, 979. 72	146. 10	29, 227. 53	7, 768. 30	477. 33	463. 52	9, 567. 14	133, 609. 60	6, 589. 44
Colorado.....	216, 742. 56	134, 132. 42	5, 196. 85	6, 131. 95	1, 793. 67	390. 91	21. 04	2, 913. 41	65, 844. 65	317. 66
Connecticut.....	238, 182. 70	166, 291. 86	4, 718. 15	8, 670. 20	2, 709. 20	1, 115. 89	4, 640. 69	2, 797. 98	40, 848. 36	8, 390. 37
Delaware.....	38, 421. 99	26, 876. 00	938. 09	1, 675. 10	647. 28	61. 97	-----	898. 96	7, 270. 97	53. 62
Florida.....	244, 032. 96	205, 773. 40	3, 120. 03	3, 304. 10	943. 82	188. 84	-----	3, 077. 17	27, 600. 80	24. 80
Georgia.....	551, 855. 90	449, 725. 82	6, 012. 83	5, 793. 61	1, 410. 45	240. 30	1, 446. 00	786. 67	49, 190. 22	37, 250. 00
Idaho.....	218, 443. 81	146, 579. 56	1, 923. 67	7, 154. 40	3, 813. 26	387. 84	81. 08	1, 112. 00	54, 532. 21	2, 859. 79
Illinois.....	871, 345. 27	667, 779. 57	5, 246. 62	3, 583. 81	904. 30	292. 13	-----	3, 251. 71	19, 353. 06	170, 934. 07
Indiana.....	476, 856. 96	370, 978. 27	4, 996. 15	19, 389. 71	5, 400. 39	638. 25	187. 00	2, 096. 14	71, 310. 59	1, 860. 46
Iowa.....	931, 613. 56	666, 969. 86	10, 675. 22	36, 980. 77	35, 686. 55	1, 925. 52	1, 800. 00	3, 863. 40	173, 442. 76	269. 48
Kansas.....	465, 921. 90	314, 174. 77	7, 080. 04	18, 111. 46	9, 187. 13	1, 416. 73	661. 43	6, 390. 80	70, 437. 87	38, 461. 97
Kentucky.....	422, 482. 54	298, 495. 27	5, 328. 86	6, 985. 05	1, 755. 90	555. 92	3, 600. 00	2, 347. 42	102, 968. 27	445. 85
Louisiana.....	347, 812. 60	294, 059. 07	3, 893. 61	7, 375. 09	1, 852. 03	878. 54	400. 00	4, 831. 82	34, 401. 44	121. 00
Maine.....	134, 263. 32	95, 307. 71	1, 081. 71	3, 657. 68	372. 70	153. 27	-----	1, 797. 63	31, 892. 62	-----
Maryland.....	247, 830. 34	188, 020. 22	2, 892. 48	7, 298. 40	1, 309. 01	130. 54	1, 000. 00	1, 299. 85	45, 856. 59	23. 25
Massachusetts.....	384, 080. 83	246, 032. 81	4, 500. 99	6, 777. 32	3, 393. 45	544. 03	38. 92	1, 881. 28	42, 867. 45	78, 044. 58
Michigan.....	426, 753. 32	363, 838. 47	4, 222. 01	4, 232. 39	1, 508. 54	182. 49	2. 88	1, 281. 86	51, 156. 48	328. 20
Minnesota.....	467, 966. 19	346, 159. 47	9, 056. 77	6, 758. 40	9, 575. 99	570. 45	273. 35	2, 874. 93	89, 918. 45	2, 778. 38
Mississippi.....	460, 508. 77	405, 613. 99	3, 208. 00	3, 582. 29	2, 409. 38	570. 04	704. 45	1, 152. 58	42, 862. 19	405. 85
Missouri.....	433, 789. 44	314, 889. 92	13, 278. 76	9, 979. 96	6, 750. 89	467. 55	506. 27	6, 687. 00	76, 250. 81	4, 978. 28
Montana.....	298, 276. 98	183, 059. 10	3, 400. 02	14, 953. 31	2, 090. 17	512. 65	315. 56	1, 493. 91	92, 452. 26	-----
Nebraska.....	329, 061. 54	241, 084. 07	5, 419. 17	11, 200. 41	7, 715. 71	522. 60	-----	5, 526. 15	52, 339. 80	5, 253. 63
Nevada.....	99, 746. 34	59, 735. 51	6. 97	3, 339. 51	1, 445. 50	149. 20	59. 00	2, 310. 36	31, 057. 02	1, 643. 27
New Hampshire.....	125, 542. 87	83, 530. 88	5, 969. 56	3, 876. 25	1, 385. 45	1, 358. 20	2, 047. 79	1, 247. 57	24, 673. 95	1, 453. 22
New Jersey.....	271, 626. 34	190, 790. 81	2, 602. 82	8, 026. 57	4, 399. 50	318. 87	466. 75	7, 377. 24	55, 554. 17	2, 089. 61
New Mexico.....	146, 821. 78	92, 285. 04	1, 349. 67	3, 036. 70	1, 620. 90	607. 89	-----	1, 809. 62	45, 346. 93	765. 03
New York.....	1, 250, 029. 14	673, 485. 84	113, 371. 32	84, 225. 37	12, 934. 76	805. 71	26, 358. 16	17, 738. 22	182, 062. 08	139, 047. 68
North Carolina.....	573, 644. 85	479, 233. 89	4, 002. 83	7, 078. 28	2, 412. 76	705. 04	5, 331. 00	2, 642. 04	77, 401. 33	168. 68
North Dakota.....	266, 395. 84	175, 426. 31	5, 241. 46	4, 361. 60	3, 071. 30	328. 32	-----	743. 19	70, 715. 63	2, 177. 03
Ohio.....	597, 325. 95	454, 798. 73	12, 825. 00	14, 096. 55	3, 970. 43	302. 54	-----	2, 756. 43	107, 915. 02	661. 25
Oklahoma.....	468, 041. 54	418, 968. 81	2, 625. 11	4, 976. 74	1, 125. 46	369. 52	-----	279. 73	39, 693. 92	2. 25
Oregon.....	288, 736. 48	200, 510. 19	3, 035. 05	7, 924. 56	5, 547. 53	476. 07	203. 00	2, 591. 70	63, 808. 90	4, 639. 48
Pennsylvania.....	575, 010. 93	396, 544. 46	8, 886. 07	14, 137. 58	12, 542. 06	562. 58	1, 118. 50	1, 754. 67	135, 501. 05	3, 963. 93
Rhode Island.....	33, 044. 94	29, 126. 20	657. 62	817. 79	127. 40	43. 11	-----	539. 38	1, 718. 44	15. 00
South Carolina.....	405, 372. 24	326, 605. 26	6, 894. 63	5, 014. 53	3, 061. 32	399. 04	601. 50	8, 106. 41	53, 466. 21	1, 223. 34
South Dakota.....	349, 472. 84	246, 266. 84	5, 038. 70	11, 756. 04	9, 053. 84	1, 021. 12	455. 87	2, 845. 04	70, 359. 20	2, 676. 19
Tennessee.....	421, 508. 85	339, 142. 74	10, 383. 02	11, 174. 05	2, 715. 75	1, 134. 27	1, 082. 21	3, 883. 18	51, 448. 00	545. 63
Texas.....	903, 406. 04	723, 503. 89	6, 686. 21	9, 340. 84	2, 570. 94	545. 05	-----	3, 356. 80	156, 815. 81	586. 50

Utah-----	138,976.56	105,775.55	576.35	3,097.59	1,270.69	172.77	-----	592.28	26,915.42	575.91
Vermont-----	134,345.66	93,723.72	241.44	10,099.24	2,044.33	288.69	360.00	1,294.22	23,400.89	2,893.13
Virginia-----	511,915.12	398,136.66	11,148.26	8,323.89	2,756.37	653.16	44.70	1,020.26	74,646.63	15,185.19
Washington-----	314,910.84	234,237.91	3,329.44	12,932.12	3,711.91	658.07	488.55	4,859.57	54,693.27	-----
West Virginia-----	295,431.84	252,608.44	6,702.76	5,166.26	959.63	202.38	-----	1,108.59	28,683.78	-----
Wisconsin-----	377,022.75	270,338.21	10,422.54	3,852.37	1,389.82	181.58	9.45	1,735.58	89,032.33	60.87
Wyoming-----	139,439.22	91,323.62	2,261.21	3,833.13	626.38	283.97	-----	1,466.08	39,371.03	273.80
Total, 1923-----	18,484,845.00	13,669,718.39	336,906.94	477,957.00	194,642.98	225,567.34	54,900.21	148,038.03	3,031,252.99	545,861.12
1922-----	17,181,751.64	12,740,999.28	395,859.62	410,592.62	186,562.01	-----	47,197.29	129,259.56	2,765,227.90	506,053.36
1921 ³ -----	16,792,248.32	12,416,878.29	382,034.06	516,051.82	195,275.08	-----	48,735.14	140,983.36	2,873,523.01	218,767.56
1920 ⁴ -----	14,658,079.92	10,481,790.44	308,629.24	433,337.62	137,230.47	-----	36,471.25	134,720.51	2,807,798.73	318,101.66
1919-----	14,661,560.50	10,649,803.53	263,371.74	493,138.35	133,351.26	-----	19,574.36	185,407.12	2,735,151.37	181,762.77
1918-----	11,302,764.75	8,335,805.69	190,267.35	417,264.23	127,128.31	-----	18,246.60	216,040.27	1,830,764.70	167,247.60
1917-----	6,149,619.63	4,490,900.05	144,777.26	230,752.18	68,330.02	-----	6,214.88	87,223.27	1,023,405.63	98,016.34
1916-----	4,864,180.94	3,514,061.85	98,850.56	176,793.16	48,709.30	-----	4,842.21	95,182.98	849,259.37	76,481.51
1915-----	3,597,235.85	2,686,923.95	72,090.72	105,526.62	37,437.90	-----	9,614.79	63,084.01	603,432.74	19,125.12

¹ This does not include the cost of maintaining the Federal office with headquarters at Washington, D. C., amounting to \$307,183,17.
² Prior to 1923, transportation of things was included in communication service.

³ South Carolina failed to meet the full allotment to that State by \$0.95.

⁴ Pennsylvania failed to meet the full allotment to that State by \$67,234.37.

TABLE 22.—Total expenditures of funds from all sources for cooperative agricultural extension work in States for year ended June 30, 1923
BY PROJECTS ¹

State	Total	Adminis- tration	Printing and dis- tribution of pub- lications	County agent work	Home demon- stration work ²	Boys' and girls' club work	Home- eco- nomics special- ists ³	Exten- sion schools	Animal hus- bandry	Poultry	Dairying	Animal diseases	Agron- omy
Alabama	\$446,368.41	\$29,493.00	\$761.89	\$230,903.31	\$129,565.24	\$6,617.14			\$8,606.07		\$221.00	\$4,800.00	\$4,738.63
Arizona	116,204.56	12,427.85	383.89	59,304.99	18,710.77			\$977.29	1,550.04	\$968.79	1,420.09		1,411.01
Arkansas	411,430.91	37,694.15	5,115.99	192,914.66	129,840.72			580.69	1,524.25	4,306.83	6,131.79		
California	616,828.68	39,509.84		378,821.57	106,346.45	30,276.84				6,753.07	7,750.14	2,000.00	360.00
Colorado	216,742.56	24,724.86	5,196.85	116,767.85	5,896.20	16,440.00	6,838.69	1,130.34	9,313.39		650.47		7,714.71
Connecticut	238,182.70	14,680.32	8,566.41	109,529.09	10,660.30	17,959.72	14,053.73		6,245.93	11,234.86	8,567.07		5,004.16
Delaware	38,421.99	6,320.80	938.09	15,556.65	3,211.61	11,218.33							
Florida	244,032.96	13,427.05	3,199.61	121,118.47	86,830.39	4,857.44		569.66	4,772.73	4,310.45	136.00		
Georgia	551,855.90	40,254.29	6,074.83	245,880.80	154,312.63	11,829.81	8,083.02		4,871.09	5,133.44	7,637.58	1,393.65	8,409.56
Idaho	218,443.81	11,695.70	1,923.67	102,841.68	19,959.63	18,001.96	2,904.58	1,769.83	9,664.62		8,485.26		13,687.74
Illinois	871,345.27	18,311.57	5,246.62	709,220.48	66,970.28	14,092.45	18,328.50		5,431.03		5,579.72		10,423.74
Indiana	476,856.96	24,047.63	4,996.15	288,414.24	8,368.54	22,130.03	11,442.34	7,111.74	13,504.61	12,308.45	12,292.50	2,922.88	9,192.52
Iowa	931,613.56	60,690.50	10,710.14	543,098.95	89,056.19	37,670.72	35,320.56	1,450.46	14,147.79	17,762.96	24,278.07	4,589.70	15,784.06
Kansas	465,921.90	21,431.26	10,986.08	260,304.84	27,923.11	14,025.03	22,263.32	11,295.13	11,809.89	5,885.03	9,377.88	2,762.03	12,844.82
Kentucky	422,482.54	24,497.70	6,881.99	213,221.12	68,573.67	27,769.91	12,822.55	1,233.16	13,746.40	11,907.15	5,103.92	3,598.62	9,355.80
Louisiana	347,812.60	30,981.39	7,169.63	176,664.84	67,133.08	15,256.93			10,508.85	8,627.93	8,963.61	1,188.46	4,223.61
Maine	134,263.32	14,574.85	1,081.71	54,339.85	36,738.00	6,384.83	4,303.83	684.73		3,547.11	3,263.80		3,847.80
Maryland	247,830.34	25,469.71	2,892.48	109,057.68	59,863.42	8,491.00		2,735.20	3,584.07	2,663.30	3,907.81	6,400.00	4,108.51
Massachusetts	384,080.83	14,928.48	8,245.17	101,827.68	91,767.01	108,083.01	10,262.70	3,667.70	3,813.70	5,268.20	1,716.14		4,319.09
Michigan	426,753.32	16,121.84	5,250.05	208,590.33	19,341.65	40,488.77	16,417.22	6,170.01	4,274.02	7,804.70	22,572.14		19,107.53
Minnesota	467,966.19	23,028.57	8,760.73	311,450.22	21,423.81	28,462.47	14,803.80	3,138.39	9,519.83	4,745.17	14,131.64	3,195.73	3,955.85
Mississippi	460,508.77	19,490.93	4,138.05	212,984.19	143,142.81	23,296.55			4,362.43	4,260.91	16,933.02		22,533.21
Missouri	433,789.44	19,140.58	10,889.20	253,783.25	42,805.67	5,465.48	28,542.09		13,927.15	7,763.12	11,248.31		7,257.56
Montana	298,276.98	17,141.58	4,479.79	125,682.34	36,018.54	17,317.10	10,025.17	12,552.02	6,254.16	4,032.11	4,324.73	302.15	9,822.15
Nebraska	329,061.54	16,837.46	9,785.87	204,165.84	9,625.49	18,438.67	16,724.07		7,758.93	7,819.82	3,154.96		4,818.99
Nevada	99,746.34	8,450.72		51,176.81	24,183.19	1,924.37				1,275.00	1,640.26		
New Hampshire	125,542.87	9,825.26	5,969.56	46,133.48	2,539.55	21,957.50		814.66		300.00	3,721.90		5,133.98
New Jersey	271,626.34	20,698.99	3,154.18	107,657.29	45,741.07	51,814.83	9,899.41			9,896.12	5,294.93		4,071.36
New Mexico	146,821.78	16,665.05	1,200.53	84,499.05	9,652.84	8,257.19	625.15				1,250.27	3,759.14	23,201.12
New York	1,250,029.14	80,090.02	62,310.78	569,457.36	200,004.67	81,367.45	45,926.09	58,824.60	19,142.93	17,339.65	3,108.63		16,385.84
North Carolina	573,644.85	26,096.94	8,672.52	322,922.77	114,270.87	1,200.00	15,816.45		31,398.07		6,652.77	6,400.00	225.00
North Dakota	266,395.84	29,838.92	5,826.36	153,721.68	11,828.19	8,920.81	17,786.01	273.76	4,232.62	4,066.26	4,682.54	4,751.85	
Ohio	597,325.95	46,776.31	12,825.00	283,716.75	37,575.71	62,805.45	7,305.29	2,349.53	9,542.53	8,376.75	13,038.51		28,171.31
Oklahoma	468,041.54	23,159.46	6,013.19	251,546.33	125,321.57	15,018.47	7,305.29		4,268.84	8,006.90	4,911.36		3,698.80
Oregon	288,736.48	31,893.83	2,644.15	126,934.82	17,180.31	41,150.86	7,107.30	4,240.07	4,003.99	4,240.83	5,792.17		4,755.04
Pennsylvania	575,010.93	65,377.19	8,560.38	248,415.15		13,730.69	91,321.17	912.58	15,102.31	20,400.93	27,121.89		22,034.28
Rhode Island	33,044.94	2,885.54	657.62	9,210.04	9,763.62	8,397.49							1,142.00
South Carolina	405,372.24	27,755.86	6,894.63	154,965.44	125,598.99	6,354.24			12,540.98	3,701.84	11,640.85		20,414.23
South Dakota	349,472.84	26,354.53	5,000.42	235,327.97	13,736.05	13,739.45	6,585.19		6,562.11	4,592.90	4,609.42	4,892.21	7,834.89
Tennessee	421,508.85	38,069.49	10,383.02	202,993.89	95,302.82	4,673.35	7,142.02	7,499.25	12,524.59	4,439.17	13,736.36		8,820.46

Texas	903,406.04	42,531.13	14,518.18	538,888.91	206,924.98	8,919.48	14,800.03		9,206.58	8,475.34	10,076.53		5,650.21
Utah	138,970.56	12,525.37	576.35	48,057.10	25,177.41		2,624.32		3,903.61	2,155.42	6,509.10		10,593.44
Vermont	134,345.66	9,706.46	241.44	52,440.24	26,934.81		2,868.85			1,664.17	4,348.37		2,047.82
Virginia	511,915.12	48,638.73	13,333.76	251,760.44	111,819.97				9,134.18	12,268.33	14,121.05		8,734.35
Washington	314,910.84	22,759.09	4,056.46	155,387.22	32,588.94		13,436.26	258.28	4,594.63	5,416.81	9,909.48		5,247.78
West Virginia	295,431.84	23,714.25	9,154.27	119,142.39	42,972.25				7,909.67	6,600.83	6,726.63	1,841.81	2,885.23
Wisconsin	377,022.75	18,189.28	15,058.45	203,525.88	6,174.14		17,382.71	14,731.37	10,240.10	5,511.17	22,105.95		17,583.73
Wyoming	139,439.22	17,884.88	2,261.21	61,491.50	21,041.98		3,064.29		5,315.94	4,228.50	877.97		6,727.66
Total, 1923	18,484,845.00	1,226,809.21	332,987.35	9,625,817.43	2,790,419.11		502,968.18	144,970.45	338,874.66	270,060.32	369,724.59	54,798.23	388,279.58
1922	17,181,751.64	1,159,074.59	408,983.22	8,946,340.45	2,400,789.74		470,378.09	134,512.53	334,436.03	241,417.41	289,773.00	40,492.07	350,605.55
1921	16,792,248.32	1,147,756.66	382,034.06	8,911,935.32	2,388,473.21		300,146.47	147,183.19	300,270.51	209,454.02	323,182.77	36,532.87	281,547.94
1920	14,658,079.92	995,051.57	308,629.24	7,665,170.77	2,177,024.52		332,415.38	144,187.62	231,141.57	151,161.93	276,917.62	63,200.89	218,019.26
1919	14,661,560.50	930,658.24	233,616.98	7,124,500.90	2,889,210.50			131,782.14	380,168.56	199,441.89	289,756.98	71,678.74	170,534.71
1918	11,302,764.75	754,175.86	207,478.99	5,604,962.72	2,226,227.97			153,904.15	309,270.72	70,402.84	332,852.55	31,777.11	153,211.24
1917	6,149,619.63	512,891.54	137,647.87	3,058,640.94	741,679.89			175,754.15	162,063.74	59,498.54	208,966.83	44,215.50	105,529.87
1916	4,804,180.94	445,243.67	99,779.68	2,411,539.81	519,866.99			198,045.02	131,937.90	47,328.49	172,557.69	21,936.02	77,859.05
1915	3,498,815.35	295,308.48	71,597.65	1,902,230.51	319,822.50			198,353.91	42,448.08	19,475.14	106,098.08	4,563.64	20,912.81

State	Horti- culture	Botany and plant pathology	Ento- mology apieul- ture, orni- thology	Rodent pests	Forestry	Agricul- tural en- gineering	Farm manage- ment	Rural organiza- tion	Market- ing	Exhibits and fairs	Farmers' institutes	Corre- spond- ence courses	Miscel- laneous spe- cialists
Alabama	\$5,077.01	\$1,326.14	\$2,992.82			\$10,812.48			\$10,100.44	\$463.57			\$353.24
Arizona	2,745.27			\$15,841.00					14,328.87				
Arkansas	4,393.01			3,538.61		3,177.14	\$1,802.73		3,177.91	2,383.44			794.48
California	9,930.98			11,298.00		13,506.13	3,919.83		3,463.47	1,747.78	\$203.51		
Colorado			674.98	9,249.00		2,353.50	4,376.96		7,231.32		496.75		1,350.43
Connecticut	10,787.30		2,456.09			2,465.37	6,893.85						
Delaware	831.59	344.92											
Florida		4,211.16					600.00		4,612.41	2,606.84			37,250.00
Georgia	7,697.62			19,426.91									
Idaho	4,900.02		3,182.21										
Illinois	6,216.50					3,998.27	7,526.11						
Indiana	9,981.08	8,074.97	647.43			3,566.98	7,927.40				29,927.47		
Iowa	17,865.70	2,991.29	9,196.46		\$3,182.60	6,266.43	13,003.56	\$3,675.61	9,191.47	3,310.75			8,369.59
Kansas	4,870.09	3,902.15	4,286.27	6,012.51		9,338.36	3,982.66		3,424.44			\$22,621.44	
Kentucky	8,205.65					5,453.92	6,686.54		3,624.72				
Louisiana	10,091.18		3,228.37		150.00								
Maine							5,496.81						
Maryland	7,076.89	3,989.10	5,709.09						1,882.08				
Massachusetts	14,535.09	100.00	33.57		97.94	85.01	5,146.44		5,270.55	1,360.30		3,553.05	
Michigan	19,121.52		6,766.18			14,509.73	839.59		19,378.04				
Minnesota	2,052.16	3,763.26	315.57		302.12		4,944.66		2,442.91		7,469.30		

¹ This does not include the cost of maintaining the Federal office with headquarters at Washington, D. C., amounting to \$307,183.17.

² Prior to 1920, included home-economics specialists.

³ Prior to 1920, included under home demonstration work.

TABLE 22.—Total expenditures of funds from all sources for cooperative agricultural extension work, etc.—Continued

BY PROJECTS—continued

State	Horti- culture	Botany and plant pathology	Ento- mology, apicul- ture, orni- thology	Rodent pests	Forestry	Agricul- tural en- gineering	Farm manage- ment	Rural organiza- tion	Market- ing	Exhibits and fairs	Farmers' institutes	Corre- spond- ence courses	Miscel- laneous spe- cialists
Mississippi	\$10,787.46					\$5,082.75			\$16,029.67				
Missouri	8,971.25		\$1,628.95						7,091.18				
Montana	1,889.25	\$1,041.94	1,016.98	\$21,653.35		3,887.16	\$9,371.67						
Nebraska	3,959.21			2,561.00		10,555.28	3,638.01		4,134.78				\$14,029.38
Nevada				6,277.00									
New Hampshire							4,280.96						
New Jersey	12,335.54												
New Mexico	1,875.43			12,079.00					2,886.77				
New York	20,845.09	16,560.84	13,763.07		\$3,805.34	11,220.06	18,932.87	\$4,128.57					
North Carolina	9,955.63	3,739.15	9,491.77	85.70	1,812.82	9,499.57			4,444.46	\$616.00			
North Dakota		1,295.69		5,680.00			9,494.67		2,165.89	3,068.58			506.57
Ohio	12,248.04		4,819.00			9,477.41	9,459.13		3,623.10				
Oklahoma	4,135.72		3,577.76	6,193.00		3,984.85	900.00		6,292.65				
Oregon	5,077.18			15,019.00		3,553.92	8,850.36						
Pennsylvania	11,446.36	13,235.65	15,156.14		4,836.74		7,530.54	9,828.93					
Rhode Island							988.63						
South Carolina	14,406.14	1,232.63	4,997.34					754.33	14,114.74				
South Dakota			4,312.27	6,149.00									
Tennessee	1,361.74					4,505.50	5,270.93						
Texas	9,748.19		4,818.05	9,282.00		3,610.99			10,951.70				
Utah	2,354.55	1,727.75	826.79	7,261.00		4,785.92		8,967.64	5,812.87				
Vermont	426.13					2,301.25			2,108.50			4,600.04	5,674.56
Virginia	17,718.09	2,847.42	762.85			7,812.39	4,153.00		3,486.58				
Washington	5,342.13	3,749.13	1,896.18	10,400.00		3,721.13	3,874.21			2,867.76			
West Virginia	6,682.97	3,004.12				750.00		9,694.43			5,811.48		
Wisconsin	8,292.73	7,030.04	4,564.17			11,480.83	3,888.58			96.46			
Wyoming				8,216.70									
Total, 1923	316,237.49	84,167.35	111,120.36	176,222.78	14,187.56	177,600.66	163,830.70	37,049.51	171,271.52	18,521.48	74,096.45	35,322.00	68,328.25
1922	272,175.98	106,683.99	103,562.22	154,067.62	13,201.60	128,178.32	152,623.81	21,318.83	204,185.86	10,311.31	76,063.84	8,636.92	99,549.81
1921	244,885.75	246,405.00	98,490.86	158,167.12	10,936.54	124,742.98	146,080.43	22,518.19	259,041.53	20,078.60	66,651.69	29,648.66	12,071.76
1920	190,600.55	196,723.24	88,679.73	129,141.12	10,694.57	125,161.36	116,381.31	30,025.75	179,620.88	23,245.03	70,267.48	24,998.26	26,004.41
1919	163,788.79	286,997.69	112,474.45	151,373.85	9,499.45	97,295.29	125,614.03	49,575.14	163,927.62	10,529.41	65,035.46	25,089.37	27,388.93
1918	125,604.52	61,591.37	100,783.02	58,670.91	5,099.82	64,517.11	102,302.00	42,152.51	104,268.49	12,159.98	62,259.03	21,201.60	27,224.05
1917	84,069.57	32,596.15	14,826.22	16,435.68	9,558.50	50,600.78	102,033.20	46,194.46	50,237.47	12,482.49	94,521.08	50,804.53	58,813.72
1916	79,745.13	14,014.12	8,510.74		3,638.84	36,680.32	88,469.26	39,447.36	20,493.57	12,650.06	93,815.11	30,866.67	78,528.28
1915	29,927.89	4,923.17	3,940.00		3,965.44	13,011.60	51,531.27	5,060.34	2,298.60	14,019.21	92,379.09	8,442.64	126,027.03

TABLE 23.—*Number of counties with men county extension agents*

State	Num- ber of count- ies	July 1—									
		1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
Alabama.....	67	67	67	65	62	66	65	55	55	55	54
Arizona.....	14	3	6	7	11	11	10	9	11	11	11
Arkansas.....	75	45	52	53	61	68	66	58	44	40	47
California.....	58	4	11	13	17	33	35	35	37	40	41
Colorado.....	63	13	13	19	16	29	27	24	24	26	23
Connecticut.....	8	1	6	7	8	8	8	8	8	8	7
Delaware.....	3	3	3	2	3	3	3	3	3	3	3
Florida.....	54	25	36	33	37	53	47	32	31	33	37
Georgia.....	155	80	81	83	117	120	134	97	85	98	88
Idaho.....	44	2	3	7	11	27	32	34	32	28	21
Illinois.....	102	14	18	20	22	53	63	81	85	85	94
Indiana.....	92	27	31	32	40	83	76	68	82	85	86
Iowa.....	99	9	11	16	26	97	99	99	99	99	100
Kansas.....	105	9	39	56	53	67	53	51	59	56	58
Kentucky.....	120	28	39	47	45	90	71	53	61	61	59
Louisiana.....	64	41	43	43	42	58	55	41	38	45	45
Maine.....	16	3	4	9	16	16	16	16	16	16	16
Maryland.....	24	8	13	16	23	22	23	22	23	22	23
Massachusetts.....	14	1	10	9	11	13	13	11	11	11	11
Michigan.....	83	11	17	22	30	71	63	60	64	69	64
Minnesota.....	86	27	23	19	16	85	86	82	83	77	67
Mississippi.....	82	48	49	44	53	79	75	71	50	56	56
Missouri.....	115	13	15	14	15	71	52	47	58	55	54
Montana.....	51	4	8	7	12	23	24	27	26	26	24
Nebraska.....	93	5	8	9	8	79	54	39	46	42	42
Nevada.....	17	6	8	4	6	8	4	6	7	9	11
New Hampshire.....	10	1	5	8	9	10	10	9	10	10	10
New Jersey.....	21	4	7	11	10	17	18	18	18	18	18
New Mexico.....	29	8	9	11	25	26	22	19	18	22	22
New York.....	62	25	29	36	41	56	55	55	55	55	55
North Carolina.....	100	51	64	65	69	91	87	77	59	66	73
North Dakota.....	53	17	15	15	17	38	32	28	36	36	33
Ohio.....	88	8	10	12	20	63	65	63	80	83	85
Oklahoma.....	77	40	56	59	62	77	70	73	71	74	67
Oregon.....	36	10	12	13	14	24	23	26	26	24	22
Pennsylvania.....	67	10	14	22	45	53	40	54	57	63	60
Rhode Island.....	5	4	4	4	5	4	4	4	4	4	4
South Carolina.....	46	43	43	42	40	43	45	45	42	42	38
South Dakota.....	69	3	5	11	13	59	36	39	43	48	43
Tennessee.....	95	36	38	48	57	91	76	45	38	41	48
Texas.....	253	98	99	90	92	178	168	127	128	143	148
Utah.....	29	8	10	8	15	28	22	21	19	19	22
Vermont.....	14	7	9	11	13	13	13	12	13	13	11
Virginia.....	100	53	55	51	53	75	71	57	61	67	70
Washington.....	39	7	10	13	22	34	29	32	31	28	24
West Virginia.....	55	13	27	29	45	48	48	40	31	40	39
Wisconsin.....	71	9	12	13	22	59	41	42	50	50	47
Wyoming.....	21	3	6	8	13	15	13	14	16	16	16
Total.....	13,044	928	1,136	1,225	1,436	2,435	2,247	2,033	2,043	2,114	2,097

¹ Number of counties reporting agricultural products.

TABLE 24.—*Number of counties with women county extension agents*

State	Num- ber of count- ies	July 1—									
		1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
Alabama.....	67	18	19	27	28	67	54	32	36	34	34
Arizona.....	14					3	6	6	8	10	9
Arkansas.....	75	15	20	31	47	65	58	42	34	32	38
California.....	58					24	8	10	10	16	21
Colorado.....	63			2		7	3	2	1	2	2
Connecticut.....	8				5	8	6	6	3	5	6
Delaware.....	3				1	3	2				
Florida.....	54	24	27	28	35	54	42	29	28	29	24
Georgia.....	155	29	48	45	57	125	93	66	66	70	68
Idaho.....	44					24	4	5	5	21	30
Illinois.....	102			1		88	17	11	11	11	16
Indiana.....	92					22	8	5	3	2	2
Iowa.....	99					96	23	19	21	18	17
Kansas.....	105					14	8	9	7	8	9
Kentucky.....	120	9	19	24	27	96	74	18	19	26	24
Louisiana.....	64	13	13	18	20	33	32	24	25	26	28
Maine.....	16					14	2	5	10	14	15
Maryland.....	24	5	6	10	13	22	23	21	17	16	17
Massachusetts.....	14			1	6	12	10	9	9	11	9
Michigan.....	83			1	1	24	13	12	10	8	7
Minnesota.....	86					39	8	8	7	4	3
Mississippi.....	82	33	33	32	49	71	64	53	35	48	51
Missouri.....	115					48	20	11	14	13	8
Montana.....	51					18	11	9	7	11	7
Nebraska.....	93				2	30	10	7	7	3	3
Nevada.....	17			1		10	5	5	6	4	4
New Hampshire.....	10				2	9	6	3	5	6	8
New Jersey.....	21			1		8	5	8	7	9	8
New Mexico.....	29					11	5	4	4	2	4
New York.....	62			1	3	38	24	22	28	31	32
North Carolina.....	100	27	34	44	48	72	66	59	47	49	50
North Dakota.....	53				2	33	5	4	2	6	2
Ohio.....	88			1		13	5	2	7	10	8
Oklahoma.....	77	19	24	22	23	50	46	40	36	37	42
Oregon.....	36					15	5	5	6	4	4
Pennsylvania.....	67			1		48					¹ 28
Rhode Island.....	5					4		2	3	5	2
South Carolina.....	46	21	24	31	36	44	45	45	36	36	36
South Dakota.....	69					42	3	3	1	1	15
Tennessee.....	95	18	24	31	49	94	77	41	26	25	28
Texas.....	253	26	27	38	31	67	69	55	38	52	79
Utah.....	29			2	2	14	4	6	3	15	4
Vermont.....	14					7	5	4	6	9	10
Virginia.....	100	17	22	25	38	52	36	28	23	30	34
Washington.....	39					22	6	8	7	7	6
West Virginia.....	55	5	10	12	12	33	22	12	8	18	15
Wisconsin.....	71					17	4	2	1	1	1
Wyoming.....	21					5	7	7	6	6	6
Total.....	² 3,044	279	350	430	537	1,715	1,049	784	699	801	874

¹ Several agents cover more than one county.² Number of counties reporting agricultural products.

